

#### TOWN OF WILLSBORO BLACK ASH POND ENVIRONMENTAL RESTORATION PROJECT SUPPLEMENTAL SITE INVESTIGATION REPORT

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Prepared for:

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# **Section 1: Introduction**

### 1.1 Project Background Summary

The Town of Willsboro Black Ash Pond encompasses approximately 25 acres and is located at the terminus of School Street in the Town of Willsboro (hereinafter "Town"), Essex County, New York. The site is a former industrial property bounded to the north and west by the Boquet River, to the east by lands owned by the Adirondack Nature Conservancy (ANC) and to the south by lands owned by the ANC and Town. The site was deeded to the Town in 1966 by Georgia-Pacific Corporation. There are no buildings or structures present on the site. The site was previously used for deposition and settling of combustion residue slurry (black ash). Phase I Environmental Site (ESA) Assessments for the parent parcel performed in 2001 and 2003, and a limited Phase II ESA conducted on the parent parcel in 2003, examined the black ash and discovered metals exceeding NYSDEC guidelines.

The site location is shown in Figure 1, and lies in the Town at an elevation of approximately 50 feet above mean sea level contiguous to the Boquet River approximately two (2) miles west of Lake Champlain. Figure 2 depicts the topography of the property and general site features. Although a portion of the southern end of the parcel is fenced due to the adjacent Town Wastewater Treatment Plant, access can be obtained directly from a NYSDEC fishermen parking area. The surface of the site is generally flat, with topography slightly climbing to the south. No permanent structures exist, however a municipal wastewater treatment plant occupies a contiguous 2.7 acre parcel along the southern border. The majority of the parcel is covered by black ash and a thin layer of topsoil at some locations. Topographically, the site is located within the Boquet River floodplain, with uplands to the south and east.

Consistent with area topography, stormwater runoff percolates through the permeable black ash overburden and seeps into the Boquet River through the former dike/berm and eventually Lake Champlain. According to US Department of Agriculture-Soil Conservation Service Soil Survey mapping for Essex County, the soils in the vicinity of the site are comprised primarily of mine spoil and urban land/fill. Review of surficial geologic mapping indicates the unconsolidated soils in the vicinity of the site consist of a thin layer of lacustrine silt and clay, likely laminated and calcareous, overlain by riverine sandy loam, sands and gravels. The unconsolidated soils are probably underlain by glacial till.

The thickness of these types of unconsolidated deposits is typically variable in the immediate vicinity of the Boquet River. Regional bedrock geologic mapping indicates that bedrock underlying the site consists of Potsdam sandstone. Consistent with the topographic setting of the site and observation of seasonal seeps from the Black Ash Pond into the river, shallow groundwater flow would be perceived to flow from south to north. Groundwater within the deeper bedrock generally occurs within fractures, joints, and bedding planes commonly enlarged due to dissolution of carbonates and evaporates. There are reportedly no private or municipal groundwater wells used to supply potable water within a 2-mile radius of the site. The residents within a <sup>1</sup>/<sub>4</sub> mile radius of the site receive their domestic water from municipal service supplied by the Town. The Town receives raw water from Lake Champlain via Willsboro Bay approximately two (2) miles north of the project site.

## 1.2 Summary of Initial SI Results and Conclusions

A summary of the results, interpretations, and conclusions detailed in the 2006 SI Report is included in the following sections.

## 1.2.1 Soil and Waste Media Investigation Findings

The results of test trench, soil boring and soil/waste media sampling investigations completed at the site identified the extent of black ash deposition. The presence of black ash was field determined to be pervasive throughout much of the investigated area. From the results of test trench and soil boring investigations, the thickness of the black ash media ranged from 4 ft along the perimeters of the site to nearly 20 ft within the interior of the site. At some test trenches (TT-8, 12, 16, 20 27, 30) and soil borings (B-4, B-5, B-8, B-11, B-12, MW-3, and MW-6) a variable layer (typically 7 ft thick) of apparent paper mill sludge was identified immediately below the black ash.

Evidence of other potential environmental impacts, including possible petroleum and/or coal tar contamination, was identified during the completion of TT-39. Of the 16 soil samples tested, an elevated presence of numerous semi-volatile organic compounds was only detected in the soil sample collected from TT-39 (48-inches below grade), where a significantly elevated concentration (above TAGM 4046 Soil Cleanup Objectives) of benzo(a)pyrene (84 ug/Kg), and other detectable base-neutral semi-volatile organic compounds, was identified. Although the origin of such semi-volatile organic compound contamination cannot be verified, it is likely that previous waste deposition in the vicinity of TT-39 included the disposal of some type of petroleum or coal tar related substance at this specific location.

Although the results of soil/ash media sample analysis did not reveal the consistent presence of any other volatile organic, semi-volatile organic, or PCB/pesticide compounds, elevated concentrations of numerous heavy metals (exceeding applicable TAGM 4046 recommended soil cleanup values and/or background soil conditions) was consistently identified within the majority of black ash samples collected as part of the project. Background soil sample (location BG1-S-05-12) analysis revealed slightly elevated concentrations of aluminum (9,030 mg/Kg), calcium (2,420 mg/kg), iron (9,840 mg/Kg), magnesium (1,500 mg/Kg), manganese (212 mg/Kg), potassium (183 mg/Kg), and sodium (121 mg/Kg). The presence of metals including antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, nickel, selenium, silver, thallium, vanadium, and zinc was typically not detected or detected at only trace to low-level concentrations in the background soil sample.

As shown in Table 1, the primary heavy metals identified, at concentrations that exceeded metal specific TAGM 4046 recommended soil cleanup objectives and/or site background conditions, within the soil samples collected from the majority of test trench excavations and soil borings included antimony (5.2 to 21.1 mg/Kg), barium (15.7 to 85.2 mg/Kg), cadmium (not detected to 0.43 mg/Kg), calcium (1,940 to 353,000 mg/Kg), chromium (2 to 21.2 mg/Kg), copper (1.6 to 15.5 mg/Kg), iron (749 to 70,400 mg/Kg), lead (1.1 to 11.5 mg/Kg), magnesium (158 to 3,790 mg/Kg), potassium (159 to 3,120 mg/Kg), vanadium (3.6 to 76.3 mg/Kg), and zinc (6.3 to 217 mg/Kg).

The results of the SI revealed the black ash covers an extensive area of the Black Ash Pond site, as well as some adjacent areas, and it exhibits elevated concentrations of multiple heavy metals. Since the waste ash media exists in an environment susceptible to weathering and erosion, it was previously concluded there exists significant potential for airborne metals emissions, metals leaching to local groundwaters and contaminant transport, via stormwater/erosion runoff, to the Boquet River.

## 1.2.2 Groundwater Investigation Findings

Although glacial till is known to underlie a portion of the site, non-native fill, gravel, and perched groundwater was found within the central and eastern portions of the site. With the exception of perched groundwater existing within non-native fill at the site, shallow groundwater was found at a depth of 14 to 18 feet below grade, and shallow groundwater flow appears to trend toward the Boquet River (from the south and southwest to the northeast). Groundwater contours and flow directions identified during the initial SI are shown in Figure 4.

As shown in Table 1, volatile organic compounds were not detected within any of the seven well groundwater samples. Similarly, although a trace (estimated) concentration of 4,4-DDE was detected within the well groundwater sample collected from upgradient well MW-2, the presence of any other pesticides or PCBs was not detected within any of the other well groundwater samples. Analysis of the well groundwater samples did not reveal the detectable presence of semi-volatile organic compounds within the groundwater samples collected from wells MW-3, MW-4, MW-5, MW-6, and MW-7. Although the groundwater samples collected from wells MW-1 and MW-2 exhibited similar low-level concentrations of diethylphthalate, di-n-butylphthalate, and butylbenzylphthalate, plasticizer compounds such as these types of phthalates are often a result of sampling or laboratory cross-contamination.

As shown in Table 1, metals analysis of the seven well groundwater samples generally revealed nondetectable to only trace or low-level concentrations of beryllium, cadmium, cobalt, copper, mercury, nickel, selenium, silver, and vanadium. Similar to the soil/black ash samples collected as part of subsurface investigations at the site, each of the seven monitoring well groundwater samples exhibited elevated concentrations of aluminum (132 to 44,000 ug/L), barium (19.1 to 460 ug/L), calcium (54,300 to 1,740,000 ug/L), potassium (4,180 to 18,900 ug/L), and zinc (not detected to 741 ug/L). Consistent with the metals detected within the soil/ash media samples collected as part of subsurface investigations at the site, the majority of well groundwater samples collected also exhibited elevated concentrations of antimony (22.3 to 109 ug/L), magnesium(16,700 to 65,300 ug/L), iron (2,030 to 63,500 ug/L), manganese (71.4 to 2,270 ug/L), sodium (19,400 to 83,100 ug/L) and thallium (8.3 to 21.6 ug/L) which exceeded applicable Class GA Groundwater Quality Standards or Guidance Values. The groundwater samples collected from MW-3, MW-4, and MW-5 also exhibited Class GA Groundwater Quality exceedances for arsenic, while the groundwater samples collected from MW-1 and MW-6 also exhibited Class GA Groundwater Quality exceedances for chromium.

Based on comparison of background soil sample (collected off-site from a former school playground), ash media sample, and groundwater sample analyses, it appears the same non-native metals within the black ash media are leaching to the local shallow groundwater. Since it appears the Boquet River is a "gaining stream" receiving local shallow groundwater discharge, it was concluded that elevated metals concentrations are likely discharging to the river.

## 1.2.3 Boquet River Sediment Investigation Findings

During the completion of the Boquet River sediment sampling effort, evidence of significant erosion of black ash and cinders was observed along the majority of the southern bank of the Boquet River. The most significant areas of ash-cinder erosion were observed in immediate the vicinity of western side of the Black Ash Pond, where layers of black ash (ranging in thickness from 15 to 20 feet) immediately border the river.

As shown in Table 1, the presence of semi-volatile organic compounds was not identified within the majority of the sediment samples collected, with the exception of dimethylphthalate (1700 ug/kg) and 2,6-dinitrotoluene (540 ug/kg) within sample SD-4 (18-inches) and pyrene (57 ug/kg) within sample SD-6 (6-inches). Similar to acetone, phthalates are often identified within environmental media as a result of cross-contamination occurring during sampling and/or laboratory analysis. As shown in Table 1, the presence of PCBs or pesticides was not identified within any of the 12 river sediment samples collected.

As shown in Table 1, metals analysis of the sediments collected from the Boquet River generally revealed elevated concentrations of aluminum (1,530 to 2,810 mg/kg), antimony (6 to 68.5 mg/kg), barium (5.3 to 14.5 mg/kg), calcium (941 to 6,310 mg/kg), iron (3,640 to 8,360 mg/kg), magnesium (640 to 1,750 mg/kg), manganese (44.4 to 113 mg/kg), potassium (43.3 to 164 mg/kg), sodium (99.8 to 247 mg/kg), and zinc (7.4 to 17.9 mg/kg). Metals analysis of the river sediments revealed either non-detectable or trace concentrations of metals including beryllium, cadmium, chromium, copper, cobalt, lead, mercury, nickel, lead, selenium, silver, thallium, and cyanide. Comparison of the sediment sample data collected from shallow depth (6-inches) and intermediate depth (18 inches) revealed that aluminum, antimony, barium, calcium, chromium, copper, iron, magnesium, manganese, nickel, sodium, and zinc concentrations were generally more elevated within the intermediate depth samples.

To assess the relative quality of the stream sediments, the parameters detected within the sediment samples were compared with the criterion for parameters listed within the Technical Guidance for Screening Contaminated Sediment (NYSDEC – Division of Fish and Wildlife Document dated November 1993, Reprinted January 1999). This sediment comparison includes an assessment of various inorganic and organic parameters versus specific aquatic, human health and wildlife criteria. With respect to the volatile organic and semi-volatile organic compounds detected as estimated or trace values within the majority of sediment samples, each of the respective parameters were identified at concentrations significantly below one or more of the three parameter specific sediment criteria categories listed within the Sediment Criteria Guidance Document.

As compared to the sediment metals criteria, the following sediment samples exhibited metals concentrations that exceeded the corresponding guidance lowest effect level or severe effect level:

### Summary of Metals Detected Within Sediment Samples Above Guidance Lowest or Severe Effect Level

		Lowest	Severe
<u>Sample</u>	<u>Metal (Concentration)</u>	Effect Level	Effect Level
SD-5-SU-05-18"	Antimony (68.5 mg/kg)	2.0 mg/kg	<u>25.0 mg/kg</u>
SD-2-SU-05-18"	Antimony (7.2 mg/kg)	2.0 mg/kg	25.0 mg/kg
SD-4-SU-05-6"	Antimony (16.5 mg/kg)	<u>2.0 mg/kg</u>	25.0 mg/kg
SD-4-SU-05-18"	Antimony (6.0 mg/kg)	2.0 mg/kg	25.0 mg/kg
SD-5-SU-05-18"	Nickel (16.6 mg/kg)	<u>16.0 mg/kg</u>	50.0 mg/kg

## 1.2.4 Qualitative Human Health Risk Assessment

A qualitative human health risk evaluation was completed as part of the SI. The procedure for performing the risk assessment was consistent with USEPA methodologies and the scope was developed in accordance with NYSDOH guidance. The sequencing of steps was modified to streamline the process consistent with the goals of Brownfield site investigations. This qualitative risk assessment was basically a two-step process, as follows:

- Contaminant identification and selection of contaminants of concern
- Exposure assessment to identify actual or potential exposure pathways

Sampling was conducted for surface soil, subsurface soil, groundwater, and river sediment. There was no surface water or quantitative air sampling performed as part of the SI. A limited number of organic compounds and numerous heavy metals were detected within the media collected as part of the SI.

The Black Ash Pond is located in a rural area just outside the Hamlet of Willsboro. The surrounding properties include a municipal wastewater treatment plant, residential properties, Nature Conservancy forest preserve, and a sensitive river environment. The residential properties are located approximately 0.3-miles west of the site, generally upgradient. Local groundwater flows from the south and southwest to the northeast and the Boquet River. Downgradient, land usage generally includes a forest preserve and a sensitive river environment. Access to the property is generally unrestricted. Given the location just outside the hamlet, groundwater use for potable water is unlikely. Current populations that could potentially be affected by contaminants at the site are limited. Area drinking water is provided by the Town. The site and most adjacent sites (except the municipal wastewater treatment plant) are vacant, so there are no onsite workers.

Access to the site is limited to a gravel road to the Town boat launch. No other public roads border the site. Contamination leaving the site would most likely occur through erosion and runoff directly to the Boquet River. Exposure to fishermen or swimmers is possible.

Based on this information, populations potentially affected by site contaminants would include:

- Pedestrian Trespassers unauthorized visitors to and through the site may be exposed to contaminated ash solids and/or fugitive ash dust/particles
- Municipal Sewer Employees exposed to fugitive ash dust/particles and contaminated infiltration/inflow entering nearby sewers
- General public pedestrians or vehicle passengers on the gravel access road and/or fishermen/swimmers in the Boquet River
- Future on-site construction workers workers involved in excavation of ash/soils in the

areas of the site that are contaminated (note that this assessment excludes workers performing remedial activities as part of the project)

#### Exposure Pathway Identification

Exposure pathway identification consists of the following four steps:

- Contaminant source Data from the sampling and analysis program identified various levels of contamination (predominantly elevated metals concentrations) in the ash media and groundwater.
- Transport medium The transport media for each contaminant source is identified in the table below. Consistent with the characteristics and location of the site, possible transport media could include: ash solids/dust, stormwater or leachate, and groundwater.
- Exposure points The exposure point is the point of potential human contact with the contaminated medium under reasonable current and future land uses. The exposure points for the Black Ash Pond site are shown in the table below.

Contaminant	Transport	Exposure
Source	Medium	Point
Groundwater	Groundwater	On-site construction
		workers
Stormwater and/or	Stormwater and/or	Pedestrian
Leachate	Groundwater	trespassers; On-site
		construction workers
	Sanitary sewer	Sewer worker
Surface and	Ash-Solid Media	Pedestrian
Subsurface Ash		trespassers; On-site
		construction workers
	Ground water	On-site construction
		worker

- Exposure route The routes of exposure for each potential exposure point identified above are discussed below:
  - Pedestrian trespasser exposure to ash solids (via direct contact or dust inhalation) is likely on a consistent basis as the site is located adjacent to a fisherman's access site and boat launch.
  - Although pedestrian trespasser exposure to contaminated groundwater, contaminated stormwater, and/or contaminated leachate seeps (via direct contact) is less likely, due to less frequent heavy precipitation/runoff events, such transport media will result in contaminant migration to the Boquet River.
  - Exposure of on-site or off-site workers to site contaminants is limited to the unlikely circumstance of workers involved with nearby sanitary sewers working at the same time that contaminants from the site were entering the sewer system crossing the site. Typically, this would only occur during periods of significant precipitation and/or runoff. Exposure could occur via ingestion, inhalation, and/or dermal contact.
  - Exposure of on-site workers to surface and subsurface ash media is possible in the case if no remediation of ash media takes place. Excavation into contaminated ash could

result in exposure via ingestion, dermal contact, or inhalation of dust particles.

• Exposure of on-site workers to contamination in groundwater is possible in the case if no remediation of ash media takes place. Excavation into contaminated ash that is below the water table could result in exposure via ingestion, dermal contact, or inhalation.

### 1.3 Supplemental Site Investigation (SSI) Approach

Based on the results of the SI, the NYSDEC requested supplemental media samples be collected from the following locations to further assess the extent of potential contamination that may have originated from historic ash waste deposition at, and in the vicinity of, the Black Ash Pond.

- <u>Subsurface Investigations at the Adjacent ANC Property</u>: During the completion of SI historical information gathering and site reconnaissance, it was discovered that a significant volume of black ash material had been disposed in the ANC property area immediately east and adjacent to the Black Ash Pond. Consistent with the request of the NYSDEC, ESE planned to complete a series of supplemental test trenches within the ANC property to assess the extent and characteristics of black ash disposed in such area. It was planned that additional soil/ash samples would be collected for TAL metals analysis (the primary black ash parameters of concern).
- <u>Supplemental Boquet River Sediment Sampling</u>: During the SI, analysis of Boquet River sediments revealed elevated concentrations of heavy metals. Consistent with the request of the NYSDEC, ESE planned to collect additional downstream sediment samples, at surface and subsurface depths, for TAL metals analysis to assess the extent and characteristics of black ash contamination within the downstream reaches of the river.
- <u>Boquet River Surface Water Sampling</u>: During the SI, analysis of the *in-situ* Black Ash Pond ash media and Boquet River sediments revealed elevated concentrations of heavy metals. Consistent with the request of the NYSDEC, ESE planned to collect a series of surface water samples from one upstream and numerous downstream locations for TAL metals analysis to assess the potential presence of metals within the river waters.

Consistent with tasks completed as part of the SI, a data usability review was performed on the SSI data to confirm general data accuracy and validity. The SSI data was subsequently used to provide an update for the original human health risk assessment. All initial and SSI data and information have been compiled and interpreted within this SSI Report. The results, interpretations and conclusions detailed in the SSI Report have also been utilized to update and confirm the results and recommendations provided in the Remedial Alternatives (RA) Report (Section 4.6).

# Section 2: Supplemental SI Efforts and Methodologies

Supplemental SI efforts were completed to further characterize, define and delineate the extent and degree of heavy metals contamination present within various media adjacent to the Black Ash Pond. As part of this SSI, tasks included: 1) review of initial SI results and NYSDEC correspondence/ recommendations; 2) preparation of an SSI proposal letter to the NYSDEC; 3) the completion of supplemental field investigations; 4) the completion of a qualitative human health risk assessment; and 5) SSI Report Preparation.

### 2.1 Supplemental Field Investigations

As an integral part of the SSI, the following various media field investigations were completed to further characterize, define and delineate the extent and degree of heavy metals contamination present within various media adjacent to the Black Ash Pond.

#### 2.1.1 Subsurface Investigations

During the week of May 24, 2007, a total of 40 subsurface test trench excavations were completed within the area known as the ANC property to identify and characterize the presence of potential buried waste and/or black ash media within the subject property, immediately adjacent to the Black Ash Pond. The locations of the Supplemental SI test trench locations are shown in Figure 3. Test trench excavations were completed with a machine excavator and an ESE representative to document trench observations and collect soil samples for laboratory analysis. Four (4) subsurface soil/ash samples were collected for TAL metals analysis, consistent with NYSDEC-ASP 1995 methodologies. The subject test trenches were completed to further assess the horizontal and vertical extent of black ash waste and abnormalities previously identified during the SI. Figure 3 identifies the location of the 40 test trenches completed during the supplemental subsurface investigation.

#### 2.1.2 Groundwater Investigations

During the initial SI, the groundwater sample collected from well MW-6 exhibited a pH value of 10.5. Because such pH value is considered significantly high (basic) for the general area, the NYSDEC requested that the groundwater at well MW-6 be re-sampled for pH analysis as part of the supplemental SI. On the morning of June 21, 2007 well MW-6 was purged of 5 well volumes using a dedicated polyethylene bailer. During the afternoon of that same day, a groundwater sample was collected from well MW-6 from this well and field measured to exhibit a pH value of 11.87 SU.

## 2.1.3 Boquet River Sediment and Surface Water Investigations

Sediment samples were collected from two (2) depth intervals (6-inches and 18-inches) at five (5) supplemental downgradient locations within the Boquet River. As part of the Supplemental SI, surface water samples were also collected from one (1) upstream and six (6) downstream locations within the Boquet River, shown in Figure 3. The collected surface water and sediments samples were analyzed for TAL metals analysis, consistent with applicable Inorganic Laboratory Methods (ILM) in order to determine the nature and extent of related metals concentrations within the river surface waters and sediments. The locations of river sediment and water samples collected as part of the Supplemental SI are shown in Figure 3.

## 2.2 Qualitative Human Health Risk Assessment

To assess potential site impacts on human health and the environment, an update to the qualitative human health risk assessment was completed, including a contaminant exposure and toxicity assessment. The results of this qualitative risk assessment were used to confirm the overall characterization of risk to humans and the environment previously completed as part of the SI. The revised risk assessment included an evaluation of the following aspects, based on current and historic site specific analytical data: 1) contaminant identification and selection of indicator compounds and chemicals of concern; 2) exposure assessment to identify actual or potential exposure pathways and the extent or amount of exposure; 3) toxicity assessment and dose response information; and 4) risk characterization of the potential risks or adverse health or environment effects for each of the exposure scenarios.

## 2.3 Data Usability Review and SSI Reporting

In order to provide adequate, compliant, and defensible data, consistent with NYSDEC Guidance, the analytical data generated as part of the SSI was reviewed by ESE staff for accuracy and validity. A general evaluation of field records and analytical data was performed to assess whether the data are accurate and defensible. The data usability review effort was completed for analytical data generated as part of the SSI, consistent with NYSDEC-DUSR Guidance for this type of project.

# Section 3: SSI Results

#### 3.1 Subsurface Investigations

During the week of May 24, 2007, a total of 40 subsurface test trench excavations were completed within the ANC property immediately east of the Black Ash Pond to identify and characterize the presence of potential buried ash waste within and adjacent to the site. The locations of the supplemental ANC property test trenches, along with the initial SI test trench excavations, borings, and nearby background soil sampling locations are shown on Figure 3. A listing of the conditions encountered within each of the completed test pit excavations is included within the Test Trench Logs, shown in Appendix A of this report.

#### 3.1.1 Field Observations

During the completion of supplemental test trenches along the ridge and hillside area (TT-1 through 34), the soil profile generally included a thin layer (2-3 inches) of topsoil/forest duff overlying an average 6.5-inch thick layer of black ash media. At a number of test trench locations completed within this area (test trenches 6, 14, 15, 25, 28, 29, 31, 32, 33), soil was found to be co-mingled/layered with black ash media. Evidence of black ash was not identified during the completion of test trenches 1, 8, 16, 17, 22, 23 27, and 34. During the completion of the supplemental test trench excavations along the bottom of the hill (test trenches 34-40), the soil profile generally included black ash media extending from the ground surface to a depth of 20-24 inches below grade. Evidence of black ash was not identified during the completion of test trenches 39 and 40.

The results of the test trench excavation effort completed within the ANC property generally served to identify the east, west and south boundaries of black ash media along the ridge/hillside area, while the north extent of ash material could not be identified along the steep northern bank of the ridge/hillside area. Based on the locations where black ash was identified along the ANC property ridge/hillside area and thickness of black ash ranging from 2 to 6 feet, it is estimated that at least 5,200 cubic yards of black ash media is present within this ANC property area.

Consistent with the results of the 2006 Site Investigation Report and supplemental SI field observations, the soil/ash samples were collected from test trenches TT-11 (sample WM-1), TT-7 (sample WM-2), TT-4 (sample WM-3), and TT-24 (sample WM-4), for TAL metals analysis consistent with applicable Inorganic Laboratory Methods (ILM), in order to determine the nature and extent of metals contamination within the ANC property subsurface soils/waste ash media.

### Summary of Supplemental Subsurface Soil Samples Collected Test Trench Samples

Sample	<b>Location</b>	<b>Depth</b>
WM-1-SU-07-10	Test Trench TT-11	10-inches
WM-2-SU-07-6	Test Trench TT-7	6-inches
WM-3-SU-07-9	Test Trench TT-4	9-inches
WM-4-SU-07-8	Test Trench TT-24	8-inches

## 3.1.2 Results of Soil/Waste Ash Media Sampling and Analysis

The analytical results for the soil samples collected from the previously listed supplemental SI test trench excavations are included within Appendix B and are summarized in Table 2. As part of the initial subsurface investigation effort, metals analysis of the off-site background soil samples and samples of black ash media revealed the following results:

## **Summary of Initial Site Investigation Soil Analysis Results**

- <u>Background Soil Sample Results</u>: elevated concentrations of metals including; aluminum (9,030 mg/Kg), calcium (2,420 mg/Kg), iron (9,840 mg/Kg), magnesium (1,500 mg/Kg), manganese (212 mg/Kg), potassium (183 mg/Kg), and sodium (121 mg/Kg) were identified to be slightly to significantly elevated.
- <u>Black Ash Media Sample Results</u>: elevated concentrations of the following heavy metals; antimony (5.2 to 21.1 mg/Kg), barium (15.7 to 85.2 mg/Kg), cadmium (not detected to 0.43 mg/Kg), calcium (1,940 to 353,000 mg/Kg), chromium (2 to 21.2 mg/Kg), copper (1.6 to 15.5 mg/Kg), iron (749 to 70,400 mg/Kg), lead (1.1 to 11.5 mg/Kg), magnesium (158 to 3,790 mg/Kg), potassium (159 to 3,120 mg/Kg), sodium (159 to 3,120 mg/Kg), vanadium (3.6 to 76.3 mg/Kg), and zinc (6.3 to 217 mg/Kg). These metals were consistently identified within the test trench and boring soil samples at concentrations that exceeded metal specific TAGM 4046 recommended soil cleanup objectives and/or site background conditions.
- <u>Initial ANC Property Black Ash Sample Results</u>: As compared to the six waste media samples collected from Black Ash Pond, the initial SI sample collected from the ANC property (WM-1-S-05-54) exhibited significantly more elevated concentrations of antimony (24.1 mg/kg), barium (192 mg/Kg), beryllium (1.6 mg/Kg), cadmium (0.47 mg/Kg), chromium (12.9 mg/Kg), cobalt (7.9 mg/Kg), iron (10,500 mg/Kg), manganese (480- mg/Kg), mercury (0.5 mg/Kg), potassium (424 mg/Kg), and vanadium (22.9 mg/Kg), with all of the above metals concentrations exceeding applicable TAGM 4046 soil cleanup objectives and/or non-industrial site related background conditions.

#### Summary of Supplemental Site Investigation Soil Analysis Results

**Similar** to the results of initial ash waste media sampling and analysis effort, the results of supplemental ash media sampling and analysis revealed that the samples collected from the ANC property all exhibited elevated concentration of aluminum (1,890-20,200 mg/Kg), barium (40.3-448 mg/Kg), beryllium (0.3–2.4 mg/Kg), calcium (1,090–10,400 mg/Kg), iron (3,640–14,400 mg/Kg), lead (12.1–18.2 mg/Kg), magnesium (143–1,480 mg/Kg), manganese (37.6–524 mg/Kg), nickel (8.4–33.9 mg/Kg), potassium (148–3,080 mg/Kg), vanadium (11.8–32.4 mg/Kg), and zinc (12.9–70.1 mg/Kg). **Unlike** the previous round of ash waste media analyses, the supplemental ash media samples collected from the ANC property exhibited more elevated concentrations of arsenic (8.1 to 23.6 mg/Kg), mercury (0.31 to 0.99 mg/Kg), and selenium (<0.68 to 2 mg/Kg) and less elevated concentrations of antimony (<4.1 to <4.6 mg/Kg). **All four ash waste samples collected as part of the supplemental SI exhibited concentrations of arsenic (8.1 – 23.6 mg/Kg), beryllium 0.3 – 2.4 mg/Kg), lead (12.1 – 18.2 mg/Kg) and mercury (0.24 – 0.99 mg/Kg) that exceeded metal specific TAGM 4046 recommended soil cleanup objectives and/or site background conditions.** 

Of the four ash waste sample collected, the sample collected at trench location TT-4 (sample WM-3-SU-07-9) exhibited the highest concentrations of numerous TAL metals, including; aluminum, barium, cadmium, calcium, chromium, cobalt, copper, iron, lead, manganese, nickel, potassium, sodium, vanadium, and zinc concentrations that all exceeded metal specific TAGM 4046 recommended soil cleanup objectives and/or site background conditions. As shown on Table 2, the three other waste ash samples, collected from trench locations TT-11, TT-7, and TT-24, revealed either low-level, trace or non-detectable concentrations of cadmium, chromium, cobalt, copper, and antimony.

## 3.2 Groundwater Investigations

As previously noted, on the morning of June 21, 2007 well MW-6 was purged of 5 well volumes using a dedicated polyethylene bailer. During the afternoon of that same day, a groundwater sample was collected from well MW-6 from this well and field measured to exhibit a pH value of 11.87 SU. Although it cannot be confirmed, it is suspected that the cause for the elevated groundwater pH in well MW-6 groundwater is related to possible cement-grout intrusion within or immediately adjacent to the well screen interval sands.

## 3.3 Boquet River Supplemental Sediment and Surface Water Investigations

## 3.3.1 Field Observations

As previously mentioned, sediment samples were collected from two (2) depth intervals (6-inches and 18-inches) at five (5) supplemental downstream locations within the Boquet River. During the completion of the supplemental river sediment sampling event, the collected sediment samples were characterized to be fine-coarse grained sand and silt and included an obvious significant content of dark colored particles.

## 3.3.2 Results of Sediment Sampling and Analysis

The analytical results of the river sediment samples collected as part of the Supplemental SI are included within Appendix -B and summarized within Table 2. Consistent with the results of Initial SI sediment sample analysis, metals analysis of the supplemental sediments collected from the Boquet River generally revealed elevated concentrations of aluminum (2,130 to 4,950 mg/Kg), barium (7.9 to 33 mg/Kg), calcium (1,470 to 3,390 mg/Kg), iron (4,520 to 8,990 mg/Kg), magnesium (899 to 1,900 mg/Kg), manganese (36.6 to 90.8 mg/Kg), potassium (86.2 to 181 mg/Kg), sodium (129 to 526 mg/Kg), and zinc (11 to 18.6 mg/Kg). Also similar to the Initial SI results, metals analysis of the supplemental SI river sediments revealed either not-detectable or low-level concentrations of metals including; antimony, beryllium, cadmium, chromium, copper, cobalt, lead, mercury, nickel, lead, selenium, silver, thallium, as well as cyanide.

Comparison of the supplemental sediment sample data collected from shallow depth (6-inches) and intermediate depth (18 inches) revealed that aluminum, barium, calcium, chromium, copper, iron, magnesium, manganese, nickel, sodium, and zinc concentrations were generally more elevated within the intermediate depth (deeper) samples.

To assess the relative quality of the stream sediments, the parameters detected within the sediments samples were compared with the criterion for those parameters listed within the Technical Guidance for Screening Contaminated Sediment (NYSDEC – Division of Fish and Wildlife Document dated November 1993, Reprinted January 1999). In general, this sediment comparison includes an assessment of various inorganic and organic parameters versus specific aquatic, human health and wildlife criteria.

As compared to the sediment metals criteria, the following sediment samples exhibited metals

concentrations that exceeded the corresponding guidance lowest or severe effect level:

#### Summary of Metals Detected in Sediment Samples Above Guidance Lowest or Severe Effect Level

	Lowest	Severe
<u>Metal (Concentration)Ef</u>	<u>ffect Level</u>	Effect Level
<u>sults</u>		
Antimony (4.9 mg/kg)	2.0 mg/kg	25.0 mg/kg
Antimony (68.5 mg/kg)	2.0 mg/kg	<u>25.0 mg/kg</u>
Antimony (7.2 mg/kg)	<u>2.0 mg/kg</u>	25.0 mg/kg
Antimony (16.5 mg/kg)	<u>2.0 mg/kg</u>	25.0 mg/kg
Antimony (6.0 mg/kg)	<u>2.0 mg/kg</u>	25.0 mg/kg
Nickel (16.6 mg/kg)	<u>16.0 mg/kg</u>	50.0 mg/kg
	Metal (Concentration)Ef sults Antimony (4.9 mg/kg) Antimony (68.5 mg/kg) Antimony (7.2 mg/kg) Antimony (16.5 mg/kg) Antimony (6.0 mg/kg) Nickel (16.6 mg/kg)	LowestMetal (Concentration)Effect Levelsults2.0 mg/kgAntimony (4.9 mg/kg)2.0 mg/kgAntimony (68.5 mg/kg)2.0 mg/kgAntimony (7.2 mg/kg)2.0 mg/kgAntimony (16.5 mg/kg)2.0 mg/kgAntimony (6.0 mg/kg)2.0 mg/kgAntimony (6.0 mg/kg)2.0 mg/kgNickel (16.6 mg/kg)16.0 mg/kg

#### 3.3.3 Results of Surface Water Sampling and Analysis

The analytical results of the surface water samples collected as part of the Supplemental SI are included within Appendix-B and are summarized within Table 2. As shown in Table 2, the surface waters collected from the Boquet River generally revealed elevated concentrations of metals including; aluminum, antimony, calcium, iron, magnesium, potassium, and sodium. A number of the surface water samples collected from the Boquet River exhibited elevated concentrations of aluminum (71.1 to 127 ug/L), antimony (<16.2 to 54.2 ug/L), mercury (<0.06 to 0.21 ug/L), selenium (3.2 to 8.4 ug/L) that exceeded Class C Surface Water Quality Standards (or next applicable Water Quality Standards

Comparison of upstream vs. downstream water samples generally revealed that the upstream samples, closest to the Black Ash Pond site (SW-1 and SW-3), exhibited higher concentrations of antimony, while the downstream samples, furthest from the Black Ash pond site (SW-6, SW-10, and SW-11) exhibited higher concentrations of aluminum. Concentrations of mercury were identified in almost all of the surface water samples at concentrations exceeding applicable Water Quality Standards.

General comparison of Boquet River sediment and surface water sample analytical data indicates that both of these media types exhibit elevated concentrations of aluminum, calcium, iron, magnesium, and sodium. General comparison of Boquet River surface water samples and ash waste sample analytical data indicates that both of these media types exhibit elevated concentrations of aluminum, calcium, iron, magnesium, and sodium. Although mercury was generally not detected within the river sediment samples, elevated mercury concentrations were identified in both the river surface water samples and ash samples collected from the ANC property. Similarly, although thallium was generally not detected in the river sediment or any of the black ash samples, detectable/elevated selenium and thallium concentrations were identified within the river surface samples and surface samples.

## 3.4 Updated Qualitative Human Health Risk Evaluation

As part of the Site Investigation, a qualitative human health risk evaluation was completed as part of the SI. An update to this evaluation, including assessment of the supplemental SI data, is detailed herein. The procedure for performing the risk assessment was consistent with USEPA methodologies and the scope was developed in accordance with NYSDOH guidance. The sequencing of steps was modified to streamline the process consistent with the goals of Brownfield site investigations. This qualitative risk assessment was basically a two-step process, as follows:

- 1. contaminant identification and selection of contaminants of concern
- 2. exposure assessment to identify actual or potential exposure pathways

#### 3.4.1 Contaminant Identification and Exposure Assessment

Data from the initial and supplemental SI was used as the basis for the risk assessment. Sampling was conducted for soil/ash waste, subsurface soil, groundwater, river sediment, and river surface waters. There was also quantitative air sampling performed as part of the Initial or Supplemental Site Investigation. The qualitative exposure assessment consisted of two steps:

- Exposure Setting Characterization Description of the physical characteristics of the site and populations near the site. This includes information such as soil types, geologic setting, and groundwater flow.
- Exposure Pathway Identification Identification of potentially exposed populations and the associated exposure pathway. The exposure pathway consists of four elements:
  - The contaminant source (e.g., contaminated groundwater, surface water)
  - The transport medium (e.g., groundwater, surface water)
  - The exposure point (e.g., drinking of contaminated well water)
  - The exposure route (e.g., ingestion)

## 3.4.2 Site Specific Qualitative Assessment

#### Contaminant Identification

Tables 1 and 2 of this report present the results of the Initial SI and Supplemental SI sampling and analysis program, respectively, that was conducted at the Black Ash Pond site.

As shown in the following table, a limited number of organic compounds and numerous heavy

metals were detected within the media collected as part of the Initial Site Investigation.

Parameter	Detected in:				
	Subsurface	Groundwater	River Sediment		
	Soil				
Naphthalene	Х				
2-methylnaphthalene	Х				
Phenanthrene	Х				
Chrysene	Х				
Benzo(b)fluoranthene	Х				
Benzo(k)fluoranthene	Х				
Benzo(a)pyrene	Х				
Indeno(1,2,3-cd)pyrene	Х				
Benzo(g,h,I)perylene	Х				
Alpha-BHC	Х				
2,6-dinitrotoluene			Х		
Pyrene			Х		
Dimethylphthalate			Х		
Various Phthalates	Х	Х			
Aluminum	Х	Х	Х		
Arsenic	Х	Х			
Antimony	Х	Х	Х		
Barium	Х	Х	Х		
Calcium	Х	Х	Х		
Cadmium	Х				
Chromium	Х	Х			
Copper	Х	Х			
Iron	Х	Х	Х		
Lead	Х	Х			
Magnesium	Х	Х	Х		
Manganese	Х	Х	Х		
Nickel	Х	Х	Х		
Potassium	Х	Х	Х		
Silver					
Sodium	Х	Х	Х		
Vanadium	Х	Х			
Zinc	Х	Х	Х		

# INITIAL SI QUALITATIVE ASSESSMENT

As shown in the following table, specific heavy metals were detected within the river surface waters, river sediment and ANC property black ash media collected as part of the Supplemental Site Investigation.

Parameter	Detected in:				
	Subsurface	Initial SI	River Sediment	River Surface	
	Soils/Ash Waste	Groundwater		Waters	
	*ANC Property				
Aluminum	Х	Х	Х	Х	
Arsenic	Х	Х			
Antimony	Х	Х	Х	Х	
Barium	Х	Х	Х	LL	
Calcium	Х	Х	Х	Х	
Cadmium	Х				
Chromium	Х	Х			
Copper	Х	Х		LL	
Iron	Х	Х	Х	Х	
Lead	Х	Х			
Magnesium	Х	Х	Х	Х	
Manganese	Х	Х	Х	Х	
Mercury	X*			Х	
Nickel	Х	Х	Х		
Potassium	Х	Х	Х	Х	
Silver					
Sodium	Х	Х	Х	Х	
Thallium				Х	
Vanadium	X	X			
Zinc	Х	Х	Х	LL	

### SUPPLEMENTAL SI QUALITATIVE ASSESSMENT

Note: LL = Detected at Low Level

## 3.4.3 Exposure Assessment

Exposure Setting Characterization

The Black Ash Pond site is located in a rural area just outside the Village of Willsboro. The surrounding properties include a municipal wastewater treatment plant, some commercial properties, Nature Conservancy forest preserve property, and a sensitive river environment. The closest residential properties are located approximately 0.3-miles to the west, at generally higher upgradient elevations. Groundwater flow in the area generally occurs from the south and southwest to the northeast and toward the Boquet River. Downgradient from the site, land usage generally includes a forest preserve and a sensitive river environment. Access to the property is generally unrestricted. Given the location just outside the Village, groundwater use for potable water is very unlikely. Current populations that could potentially be affected by contaminants at the site are somewhat limited. Drinking water in the area is provided by a public water supply. The site and most adjacent sites (except the municipal wastewater treatment plant) are vacant so there are no onsite workers. Access to the site is limited to a dirt/gravel road to the Town boat launch. No other public roads border the site.

Contamination leaving the site would most likely occur as a result of erosion and runoff directly to the Boquet River. Accordingly, exposure to fisherman or swimmers in the river is possible. Based on this information, populations potentially affected would include the following:

• Pedestrian Trespassers – unauthorized visitors to and through the site may be exposed

directly to contaminated ash solids and/or to fugitive ash dust/particles

- County sewer workers exposed to fugitive ash dust/particles and contaminated infiltration/inflow entering nearby sewers
- General public pedestrians or vehicle passengers on the gravel access road and/or fisherman/swimmers in the Boquet River
- Future on-site construction workers workers involved in excavation of ash/soils in the areas of the site that are contaminated (note that this assessment excludes workers performing remedial activities as part of the project)

### Exposure Pathway Identification

As described above, the exposure pathway identification consists of the following four steps.

- Contaminant source Data from the sampling and analysis program identified various levels of contamination (predominantly elevated metals concentrations) in the ash media, groundwater, river sediment, and river surface water.
- Transport medium The transport media for each contaminant source is identified in the table below. Consistent with the characteristics and location of the site, possible transport mediums could include: ash solids/dust, stormwater or leachate, groundwater, and river surface waters.
- Exposure points The exposure point is the point of potential human contact with the contaminated medium under reasonable current and future land uses. The exposure points for the Black Ash Pond site are shown in the table below.

Contoninort	Transmort	Even a guina	
Contaminant	Transport	Exposure	
Source	Medium	Point	
Groundwater	Groundwater	On-site construction	
		workers	
Surface Water	Surface Water	Pedestrian trespassers;	
		On-site construction	
		workers	
Stormwater and/or	Stormwater	Pedestrian trespassers;	
Leachate	and/or	On-site construction	
	Groundwater	workers	
	Sanitary sewer	Sewer worker	
Surface and	Ash-Solid Media	Pedestrian trespassers;	
Subsurface Ash		On-site construction	
		workers	
	Ground water	On-site construction	
		worker	

- Exposure route The routes of exposure for each potential exposure point identified above are discussed below:
  - Pedestrian trespasser exposure to ash solids (via direct contact or dust inhalation) is likely on a consistent basis as the site is located immediately adjacent to a fisherman's access site and boat launch area.

- Although pedestrian trespasser exposure to contaminated groundwater, contaminated stormwater, and/or contaminated leachate seeps (via direct contact) is less likely, due to less frequent heavy precipitation/runoff events, such transport mediums will result in contaminant migration to the Boquet River.
- Although pedestrian trespasser (i.e., fisherman, river swimmers) exposure to heavy metals present within the river surface waters and sediment, such exposure would inherently be limited by the low number of exposure events over time (minimal expected exposure events/time; i.e., 5-10 single pedestrian fishing or swimming events/summer season).
- Exposure of on-site or off-site workers to site contaminants is limited to the unlikely circumstance of workers involved with nearby sanitary sewers working at the same time that contaminants from the site were entering the sewer system that crosses the site. Typically, this would only occur during periods of significant precipitation and/or runoff. Exposure could occur via ingestion, inhalation, and/or dermal contact.
- Exposure of on-site workers to surface and subsurface ash media is possible in the case if no remediation of black ash media takes place. Excavation into contaminated ash could result in exposure via ingestion, dermal contact, or inhalation of dust particles.
- Exposure of on-site workers to contamination in groundwater is possible in the case if no remediation of ash media takes place. Excavation into contaminated ash that is below the water table could result in exposure via ingestion, dermal contact, or inhalation.

## 3.5 Data Usability Review

As part of the Black Ash Pond Supplemental Site Investigation Project, media samples were collected from ANC property test trench excavations, Boquet River sediments and surface waters for TAL metals analysis, in accordance with NYSDEC ASP-95 methodologies. As part of this supplemental project, the project specific analytical laboratory, Adirondack Environmental Services, Inc. (AES), provided analytical data reports in the form of NYSDEC ASP Category B reportables/deliverables packages.

As part of the services of the project specific analytical laboratory, AES completed a review of the generated analytical data for compliance with QC acceptance limits as specified in the applicable ASP method for each analysis. The following Quality Control operations and items are considered in the usability and validation of reported results; holding times, surrogate recovery, spiked sample recovery, duplicates/spike duplicate precision, tuning criteria, internal standard variation, continuing calibration variation, reference (check) sample recovery, and instrument, method, trip, and field blanks. The appropriate frequency for each operation is also considered.

A data quality review summary for the two project sample delivery groups (SDGs) is listed below.

## SDG: SD-7-SU-07-6

**Inorganics/Metals (Solids):** Samples in this SDG were analyzed for metals and cyanide using criteria for CLP – ILM 4.0. Metals analyses were completed within 180 days of

sample receipt, as required. Mercury analyses were completed within 26 days of sample receipt, as required. Cyanide analyses were completed within 12 days of sample receipt, as required. The recovery for aluminum, calcium and iron in the ICSA and the ICSAB check standards were outside the required limit. The required concentration for these analytes in the check standards is 500,000 ug/L and 200,000 ug/L, respectively. The linear range on the instrument for aluminum, calcium and iron is 250,000 ug/L, 200,000 ug/L and 100,000 ug/L, respectively. At this level, accurate recovery of aluminum, calcium and iron in check standards is not possible. No further action required. The digested spike recoveries for arsenic and thallium on sample WM-4-SU-07-8 were outside the required 75-125% limits. A post digestion spike was performed and the recoveries were within acceptable limits for these metals were within acceptable limits. The results for these metals were flagged with an "N" as specified by the protocol, indicating possible matrix interference. The elements aluminum, calcium iron, magnesium, manganese, and zinc (for sample WM-4-SU-07-8) did not meet the serial dilution criteria of 10%. These metals were flagged with an "E" as required by the protocol, indicating an estimated value resulting from a possible chemical or physical interference. Despite the above listed minor deficiencies (based on the consistency of solids media metals concentrations) the metals and cyanide data for SDG - SD-7-SU-07-6 should be considered usable.

### SDG: SW-1-SU-7

Inorganics/Metals (Water): Samples in this SDG were analyzed for metals and cyanide using criteria for CLP - ILM 4.0. Metals analyses were completed within 180 days of sample receipt, as required. Mercury analyses were completed within 26 days of sample receipt, as required. Cyanide analyses were completed within 12 days of sample receipt, as required. The recovery for aluminum, calcium and iron in the ICSA and the ICSAB check standards were outside the required limit. The required concentration for these analytes in the check standards is 500,000 ug/L and 200,000 ug/L, respectively. The linear range on the instrument for aluminum, calcium and iron is 200,000 ug/L, 100,000 ug/L, and 80,000 respectively. At this level, accurate recovery of aluminum, calcium and iron in check standards is not possible. The digested spike recoveries for mercury (sample SW-11-SDU-7) was (74%) slightly outside the required 75-125% limits. The results for this element are flagged with "N" as specified by the protocol, thus indicating possible matrix interference for this parameter, thus potentially impacting the usability of the mercury (water) data. The elements calcium, magnesium, manganese, and sodium for sample SW-11-SDU-7 did not meet the serial dilution criteria of 10%. These metals were flagged with an "E" as required by the protocol, indicating an estimated value resulting from a possible chemical or physical interference. The water samples were also analyzed for pH. turbidity, and cyanide. Samples SW-11-SDU-7 was used for the water matrix spike and the digestion analysis. All recoveries were within acceptable limits. Despite the above listed minor deficiencies (based on the consistency of water media metals concentrations exhibited) the metals and cvanide water data for SDG: SW-1-SU-7 should be considered usable.

As referenced by the laboratory in the Sample Delivery Group specific case narratives, every effort has been made to report data that is compliant with the EPA methodology cited for each analysis. In cases where the laboratory was unable to meet all method requirements prior to sample expiry, either due to the nature of the sample or other technical difficulty, results are reported with qualification with the understanding that qualified results may not be suitable for compliance purposes. Overall, as detailed under each of the above listed Sample Delivery Group

Case Narrative Data Usability Assessments, the vast majority of the data accumulated as part of the Supplemental Site Investigation project should be considered usable, as well as reasonably valid and defensible.

The results of the internal laboratory review and usability assessment are included as a preface to each of the two media specific sample delivery groups of analytical data, included within Appendix B. It should be noted that, because of the significant size of each sample delivery group data package, only the final data results were included as appendices to this report. The full ASP reportable/deliverables packages, for each of the Sample Delivery Groups, will however, be copied and submitted to the NYSDEC at a future date.

# **Section 4: Interpretations and Conclusions**

### 4.1 Summary of Initial and Supplemental SI Conclusions

The Site Investigation discussed herein has included a focus to specifically characterize and assess the black ash media, the primary media of concern for this project. In general, the results of initial and supplemental site investigations at and adjacent to the Black Ash Pond site has indicated that the primary contaminant (group) of concern includes a specific group of heavy metals. Since elevated concentrations of such heavy metals were also identified within the local groundwater, Boquet River sediments, and (to a lesser degree) the surface waters adjacent to the site, it appears that the black ash media has impacted these media types. Since the waste ash media exists in an open environment and is susceptible to weathering and erosion, there exists significant potential for airborne metals emissions, metals leaching to local groundwaters and contaminant transport, via stormwater/erosion runoff, to the adjacent Boquet River.

### 4.2 Soil and Waste Media Investigation Findings

The initial and supplemental subsurface investigations completed as part of the Black Ash Pond project to date have served to identify the horizontal and vertical extent of black ash deposition within the areas of the Black Ash Pond and adjacent ANC property. Although the presence of elevated semi-volatile organic compounds was detected within one black ash pond test trench excavation (TT-39), in general, the presence of PCBs, pesticides, volatile and semi-volatile organic compounds was NOT identified within the black ash media sampled as part of this project. TCL parameter analysis of the numerous samples collected as part of the Initial and Supplemental SI indicated that the black ash media is characterized by elevated concentrations of numerous heavy metals, many exceeding applicable TAGM 4046 recommended soil cleanup values and/or background soil concentrations.

As detailed in the SI Report, analysis of an off-site background soil sample revealed elevated concentrations of metals including; aluminum (9,030 mg/kg), calcium (2,420 mg/kg), iron (9,840 mg/kg), magnesium (1,500 mg/kg), manganese (212 mg/kg), potassium (183 mg/kg), and sodium (121 mg/kg) were identified to be slightly to significantly elevated. In comparison, analysis of the black ash media samples collected during the initial SI revealed elevated concentrations of the following heavy metals; **antimony** (5.2 to 21.1 mg/Kg), **barium** (15.7 to 85.2 mg/Kg), **cadmium** (not detected to 0.43 mg/Kg), **calcium** (1,940 to 353,000 mg/Kg), chromium (2 to 21.2 mg/Kg), copper (1.6 to 15.5 mg/Kg), **iron** (749 to 70,400 mg/Kg), **lead** (1.1 to 11.5 mg/Kg), **magnesium** (158 to 3,790 mg/Kg), **potassium** (159 to 3,120 mg/Kg), **sodium** (3.6 to 76.3 mg/Kg), and **zinc** (6.3 to 217 mg/Kg). These metals were consistently identified within specific test trench and boring soil samples at concentrations that exceeded metal specific TAGM 4046 recommended soil cleanup objectives and/or site background conditions.

As compared to the six waste media samples collected from Black Ash Pond, the initial SI sample collected from the ANC property (WM-1-S-05-54) exhibited significantly more elevated concentrations of **antimony** (24.1 mg/Kg), **barium** (192 mg/Kg), **beryllium** (1.6 mg/Kg), **cadmium** (0.47 mg/Kg), **chromium** (12.9 mg/Kg), **cobalt** (7.9 mg/Kg), **iron** (10,500 mg/Kg), **manganese** (480- mg/Kg), **mercury** (0.5 mg/Kg), **potassium** (424 mg/Kg), and **vanadium** (22.9

mg/Kg), with all of the above metals concentrations exceeding applicable TAGM 4046 soil cleanup objectives and/or non-industrial site related background conditions.

**Similar** to the results of initial ash waste media sampling and analysis effort, the results of supplemental ash media sampling and analysis revealed that the samples collected from the ANC property all exhibited elevated concentration of aluminum, barium, beryllium, calcium, iron, lead, magnesium, manganese, nickel, potassium, vanadium, and zinc. **Unlike** the previous round of ash waste media analyses, the supplemental ash media samples collected from the ANC property exhibited more elevated concentrations of **arsenic** (8.1 to 23.6 mg/Kg), **mercury** (0.31 to 0.99 mg/Kg), and **selenium** (<0.68 to 2 mg/Kg) and less elevated concentrations of antimony (<4.1 to <4.6 mg/Kg). All four ash waste samples collected as part of the supplemental SI exhibited concentrations of arsenic, beryllium, and mercury that exceeded metal specific TAGM 4046 recommended soil cleanup objectives and/or site background conditions.

Of the four ash waste sample collected, the sample collected at location WM-3-SU-07-9 exhibited the highest concentrations of numerous TAL metals, which all exceeded metal specific TAGM 4046 recommended soil cleanup objectives and/or site background conditions. As shown on Table 2, the three other waste ash samples (WM-1-SU-07-10, WM-2-SU-07-8 and WM-4-SU-07-8) revealed either low-level, trace or non-detectable concentrations of cadmium, chromium, cobalt, copper, antimony, boron, and silver. Comparison of the four supplemental ash samples did not reveal any general or obvious concentration trends with depth. Although comparison of the ash samples collected from the Black Ash Pond and ANC property revealed that there is significant variability between the two ash types, in general both ash types were identified to exhibit significantly elevated concentrations of various specific heavy metals.

## 4.3 Summary of SI Groundwater Investigation Findings

As part of the Initial SI, shallow groundwater at the site was found to exist at a depth of 14 to 18 feet below grade and shallow groundwater flow at the site appears to trend in an obvious direction toward the Boquet River (from the south and southwest to the northeast). As also detailed in the 2006 SI Report, the presence of PCBs, pesticides, volatile and semi-volatile organic compounds was not detected within the seven groundwater samples collected as part of the Initial SI.

As shown in Table 1, metals analysis of the seven well groundwater samples generally revealed non-detectable to only trace or low-level concentrations of beryllium, cadmium, cobalt, copper, mercury, nickel, selenium, silver, and vanadium. Consistent with the results of soil/ash sample analyses completed as part of the SI, each of the seven monitoring well groundwater samples exhibited elevated concentrations of **aluminum** (132 to 44,000 ug/L), **barium** (19.1 to 460 ug/L), **calcium** (54,300 to 1,740,000 ug/L), **potassium** (4,180 to 18,900 ug/L), and **zinc** (not detected to 741 ug/L).

Consistent with the metals detected within the soil/ash media samples collected as part of subsurface investigations at the site, the majority of well groundwater samples collected also exhibited elevated concentrations of **antimony** (22.3 to 109 ug/L), **magnesium**(16,700 to 65,300 ug/L), **iron** (2,030 to 63,500 ug/L), **manganese** (71.4 to 2,270 ug/L), **sodium** (19,400 to 83,100 ug/L) and **thallium** (8.3 to 21.6 ug/L) which exceeded applicable Class GA Groundwater Quality Standards or Guidance Values. The groundwater samples collected from wells MW-3,

MW-4, and MW-5 also exhibited Class GA Groundwater Quality exceedences for **arsenic**, while the groundwater samples collected from wells MW-1 and MW-6 also exhibited Class GA Groundwater Quality exceedences for **chromium**.

Based on comparison of background soil sample, ash media samples, and groundwater sample analyses, it has been concluded that the same non-native metals that persist within the black ash media are leaching to the local shallow groundwater regime. Since it appears that the Boquet River is a "gaining stream" receiving local shallow groundwaters discharge, such elevated metals concentrations are likely discharging to the river.

## 4.4 Boquet River Sediment and Surface Water Investigation Findings

During the initial SI, metals analysis of the sediments collected from the Boquet River generally revealed elevated concentrations of **aluminum** (1,530 to 2,810 mg/kg), **antimony** (6 to 68.5 mg/kg), **barium** (5.3 to 14.5 mg/kg), **calcium** (941 to 6,310 mg/kg), **iron** (3,640 to 8,360 mg/kg), **magnesium** (640 to 1,750 mg/kg), **manganese** (44.4 to 113 mg/kg), **potassium** (43.3 to 164 mg/kg), **sodium** (99.8 to 247 mg/kg), and **zinc** (7.4 to 17.9 mg/kg). In general, metals analysis of the river sediments revealed either not-detectable or trace concentrations of metals including; beryllium, cadmium, chromium, copper, cobalt, lead, mercury, nickel, lead, selenium, silver, thallium, as well as cyanide. Comparison of the sediment sample data collected from shallow depth (6-inches) and intermediate depth (18 inches) revealed that aluminum, antimony, barium, calcium, chromium, copper, iron, magnesium, manganese, nickel, sodium, and zinc concentrations were generally more elevated within the intermediate depth (deeper) samples.

Consistent with the results of Initial SI sediment sample analysis, metals analysis of the supplemental SI sediments collected from the Boquet River generally revealed elevated concentrations of **aluminum** (2,130 to 4,950 mg/Kg), **barium** (7.9 to 33 mg/Kg), **calcium** (1,470 to 3,390 mg/Kg), **iron** (4,520 to 8,990), **magnesium** (899 to 1,900 mg/Kg), **manganese** (36.6 to 90.8 mg/Kg), **potassium** (86.2 to 181 mg/Kg), **sodium** (129 to 526 mg/Kg), and **zinc** (11 to 18.6 mg/Kg). Also consistent with the results of the Initial SI, metals analysis of the supplemental SI river sediments revealed either not-detectable or low-level concentrations of metals including; antimony, beryllium, cadmium, chromium, copper, cobalt, lead, mercury, nickel, lead, selenium, silver, thallium, as well as cyanide. Comparison of the sediment sample data collected from shallow depth (6-inches) and intermediate depth (18 inches) revealed that aluminum, barium, calcium, chromium, copper, iron, magnesium, manganese, nickel, sodium, and zinc concentrations were generally more elevated within the intermediate depth (deeper) samples.

Comparison of all Site Investigation stream sediment data with the criterion for those parameters listed within the Technical Guidance for Screening Contaminated Sediment (NYSDEC – Division of Fish and Wildlife Document dated November 1993, Reprinted January 1999) identified the following exceedences of corresponding guidance lowest or severe effect levels:

#### Summary of Metals Detected in Sediment Samples Above Guidance Lowest or Severe Effect Level

		Lowest	Severe
<u>Sample</u>	<u>Metal (Concentration)Ef</u>	<u>Effect Level</u>	
Supplemental SI Re	<u>esults</u>		
SD-11-SU-07-6"	Antimony (4.9 mg/kg)	<u>2.0 mg/kg</u>	25.0 mg/kg
Initial SI Results			
SD-5-SU-05-18"	Antimony (68.5 mg/kg)	2.0 mg/kg	<u>25.0 mg/kg</u>
SD-2-SU-05-18"	Antimony (7.2 mg/kg)	<u>2.0 mg/kg</u>	25.0 mg/kg
SD-4-SU-05-6"	Antimony (16.5 mg/kg)	<u>2.0 mg/kg</u>	25.0 mg/kg
SD-4-SU-05-18"	Antimony (6.0 mg/kg)	<u>2.0 mg/kg</u>	25.0 mg/kg
SD-5-SU-05-18"	Nickel (16.6 mg/kg)	<u>16.0 mg/kg</u>	50.0 mg/kg

In general, the results of SI media analysis revealed that metals including antimony, barium, calcium, iron, magnesium, manganese, potassium, sodium, and zinc were identified at elevated concentrations within both the black ash media and Boquet River sediment samples. Although the presence of the majority of these metals (i.e., calcium, magnesium, sodium) may be partially attributed to natural background soil/sediment characteristics, it appears that the elevated presence of metals including; antimony, iron, and zinc is at least partially attributed to the erosion and deposition of black ash media into the Boquet River.

As shown in Table 1, metals analysis of the surface waters collected from the Boquet River generally revealed elevated concentrations of aluminum, antimony, calcium, iron, magnesium, potassium, and sodium. A number of the surface water samples collected from the Boquet River exhibited elevated concentrations of aluminum (71.1 to 127 ug/L), antimony (<16.2 to 54.2 ug/L), mercury (<0.06 to 0.21 ug/L), and selenium (<2.4 to 8.4 ug/L) that exceeded Class C Surface Water Quality Standards (or next applicable Standards).

Comparison of upstream vs. downstream water samples generally revealed that the upstream samples, closest to the Black Ash Pond site (SW-1 and SW-3), exhibited higher concentrations of antimony, while the downstream samples, furthest from the Black Ash pond site (SW-6, SW-10, and SW-11), exhibited higher concentrations of aluminum. Concentrations of mercury and thallium were identified in almost all of the surface water samples at concentrations exceeding applicable Class C Surface Water Quality Standards. General comparison of Boquet River sediment and surface water sample analytical data indicates that both of these media types exhibit elevated concentrations of aluminum, calcium, iron, magnesium, and sodium.

Comparison of Boquet River surface water samples and ash waste analytical data indicates that both of these media types also exhibit elevated concentrations of aluminum, calcium, iron, magnesium, and sodium. Although mercury was generally not detected within the river sediment samples, elevated mercury concentrations were identified in both the river surface water samples and ash samples collected from the ANC property. Similarly, although selenium and thallium were generally not detected in the river sediment or any of the black ash samples, detectable/elevated selenium and thallium concentrations were identified within the river surface waters, especially the most upstream surface samples.

## 4.5 <u>Qualitative Human Health Risk Assessment Summary</u>

As previously discussed, a qualitative human health risk evaluation was completed as part of the SI. As part of this Supplemental SI Report, the Qualitative Human Health Risk Assessment was updated, considering the recent Supplemental SI data. Based on the location, demography, land uses and general characteristics of the area surrounding the Black Ash Pond site, populations potentially affected by site specific parameters and media of concern would include the following:

- Pedestrian Trespassers unauthorized visitors to and through the site may be exposed directly to contaminated ash solids and/or to fugitive ash dust/particles
- County sewer workers exposed to fugitive ash dust/particles and contaminated infiltration/inflow entering nearby sewers
- General public pedestrians or vehicle passengers on the gravel access road and/or fisherman/swimmers in the Boquet River
- Future on-site construction workers workers involved in excavation of ash/soils in the areas of the site that are contaminated (note that this assessment excludes workers performing remedial activities as part of the project)

Based on an assessment of potential site/area specific exposure pathways, the following exposure points have been identified for the Black Ash Pond site:

Contaminant	Transport	Exposure
Source	Medium	Point
Groundwater	Groundwater	On-site construction
		workers
Surface Water	Surface Water	Pedestrian
		trespassers; On-site
		construction workers
Stormwater and/or	Stormwater and/or	Pedestrian
Leachate	Groundwater	trespassers; On-site
		construction workers
	Sanitary sewer	Sewer worker
	· · ·	
Surface and	Ash-Solid Media	Pedestrian
Subsurface Ash		trespassers; On-site
		construction workers
	Ground water	On-site construction
		worker

Consistent with above listed project specific assessment steps, potential routes of exposure for each potential exposure point identified above, have been identified to include:

- Pedestrian trespasser exposure to ash solids (via direct contact or dust inhalation) is likely on a consistent basis as the site is located immediately adjacent to a fisherman's access site and boat launch area.
- Although pedestrian trespasser exposure to contaminated groundwater, contaminated stormwater, and/or contaminated leachate seeps (via direct contact) is less likely, due to less frequent heavy precipitation/runoff events, such transport

mediums will result in contaminant migration to the Boquet River.

- Although pedestrian trespasser (i.e., fisherman, river swimmers) exposure to heavy metals present within the river surface waters and sediment, such exposure would be inherently limited by the low number of exposure event over time (minimal expected exposure events/time; i.e., 5-10 single pedestrian fishing or swimming events/summer season).
- Exposure of on-site or off-site workers to site contaminants is limited to the unlikely circumstance of workers involved with nearby sanitary sewers working at the same time that contaminants from the site were entering the sewer system that crosses the site. Typically, this could only occur during periods of significant precipitation and/or runoff. Exposure could occur via ingestion, inhalation, and/or dermal contact.
- Exposure of on-site workers to surface and subsurface ash media is possible in the case if no remediation of ash media takes place. Excavation into contaminated ash could result in exposure via ingestion, dermal contact, or inhalation of dust particles.
- Exposure of on-site workers to contamination in groundwater is possible in the case if no remediation of ash media takes place. Excavation into contaminated ash that is below the water table could result in exposure via ingestion, dermal contact, or inhalation.

## 4.6 Confirmation of Proposed Remedial Action Plan

As part of the Supplemental SI, it was confirmed that the primary media of concern included the black ash media and that the primary contaminant (group) of concern includes a specific group of black ash media related heavy metals. Since elevated concentrations of such heavy metals were also identified within the local groundwater, Boquet River sediments, and (to a lesser degree) the surface waters adjacent to the site, it appears that the black ash media has impacted these media types. Since the waste ash media exists in an open environment and is susceptible to weathering and erosion, there exists significant potential for airborne metals emissions, metals leaching to local groundwaters and contaminant transport, via stormwater/erosion runoff, to the adjacent Boquet River.

As concluded in the previously prepared project RA Report, it was recommended that the most effective and implementable remedial alternative for the site included, a soil cover constructed over the site (and black ash media) to minimize human/environmental contact with the black ash media. As part of the RA Report, it was also recommended that the soil cover be supplemented by stream-bank stabilization, via the construction of a retaining wall adjacent to the river perimeter of the black ash pond site, to minimize further erosion of the black ash media to the Boquet River.

The results of the supplemental SI indicated that approximately 5,200 cubic yards of black ash media are located within the adjacent ANC property. The approximate extent of adjacent property black ash waste material is shown in Figure 5. Although the metals content of black ash media within ANC property differed slightly as compared to the ash media within the Black Ash Pond site, in general both ash types were identified to exhibit significantly elevated concentrations of various specific heavy metals. Accordingly, as presented in the RA Report, it

is recommended that such ANC black ash media be removed (via excavation) from the ANC property, relocated to the Black Ash Pond area, and covered by a soil cover to minimize human/environmental contact.

Although the results of all site investigations appear to indicate that the elevated presence of metals including; antimony, iron, and zinc is at least partially attributed to the erosion and deposition of black ash media into the Boquet River, in general only slight and/or a limited number of sediment criterion exceedences were identified. Since the project specific recommended remedial alternative (and NYSDEC proposed remedial action plan) will serve to minimize further (future) erosion, runoff, and migration of the black ash media to the Boquet River, it does not appear that remediation of Boquet River sediments is warranted.

Table –1 Initial SI Media Sample Analytical Data Summary (Subsurface Soil Samples, Groundwater Samples, and Bouquet River Sediment Samples)

#### Black Ash Pond - ERP: Site Investigation Analytical Data Summary

Volatile Organic Compounds	NYSDEC	SAMPLES	TT 0 6 05 70	TT 42 C 05 20	TT 42 S 05 450	TT 46 6 05 0	TT 40 0 05 84	TT 46 6 05 00	TT 46 S 05 490	TT 47 C 05 20	TT 22 6 05 00	TT-39-S-05-48	
	Kacos (ppb)	BG1-3-05-12	11-2-3-05-72	11-12-3-05-30	11-12-3-05-150	11-10-3-03-0	11-10-3-05-04	11-10-3-03-90	11-10-3-05-180	11-17-3-05-30	11-32-3-03-90	11-33-3-05-46	
chloromethane		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
bromomethane		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
vinyl chloride		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
chloroethane		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
methylene chloride	100	7j	<16	75j	<22	<260	<36	<23	<13	<11	<19	<19	
acetone	200	<11	51	170	<22	430	38	<23	<13	<11	<19	<19	
carbon disulfide		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
1 1-dichloroethene		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
1 1-dichloroethane		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
1.2-dichloroethene-trans		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
1 2-dichloroethene-cis		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
chloroform		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
1 2-dichloroethane		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
2-butanone		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
1 1 1-trichloroethane		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
carbon tetrachloride		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
bromodichloromethane		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
1 2-dichloropropane		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
cis-1 3-dichloropropene		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
trichloroethene		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
dibromochloromethane		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
1 1 2-trichloroethane		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
benzene		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
trans-1.3-dichloropropene		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
bromoform		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
4-methyl-2-pentanone		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
2-hexanone		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
terachloroethene		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
1 1 2 2-tetrachloroethane		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
toluene		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
chlorobenzene		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
ethylbenzene		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
styrene		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
m p-xylenes		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
o-xvlene		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
methyl t-butyl ether		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
dichlorodifluoromethane		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
methyl acetate		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
freon 113		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
trichlorofluoromethane		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
cvclohexane		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
methylcyclohexane		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
1,2-dibromoethane		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
1,3-dichlorobenzene		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
isopropylbenzene		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
1,4-dichlorobenzene		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
1,2-dichlorobenzene		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
1,2-dibromo-3-chloro-propane		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	
1.2.4-trichlorobenzene		<11	<16	<80	<22	<260	<36	<23	<13	<11	<19	<19	

Semi-Vol. Organic Compounds	NYSDEC	SAMPLES	SAMPLES									
	RSCOs (ppb)	BG1-S-05-12	TT-2-S-05-72	TT-12-S-05-30	TT-12-S-05-156	TT-16-S-05-0	TT-16-S-05-0 TT-16-S-05-84		TT-16-S-05-180	TT-17-S-05-30	TT-32-S-05-90	TT-39-S-05-48
phenol		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
bis(2-chloroethyl)ether		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
2-chlorophenol		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
2-methylphenol		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
bis(2-chloroisopropyl)ether		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
4-methylphenol		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
n-Nitroso-di-n-propylamine		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
hexachloroethane		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
nitrobenzene		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
isophorone		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
2-nitrophenol		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
2,4-dimethylphenol		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
bis(2-chloroethoxy)methane		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
2,4-dichlorophenol		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
naphthalene	13000	<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	120j
4-chloroaniline		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
hexachlorobutadiene		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
4-chloro-3-methylphenol		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
2-methylnaphthalene	36400	<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	140j
hexachlorocyclopentadiene		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
2,4,6-trichlorophenol		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
2,4,5-trichlorophenol		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
2-chloronaphthalene		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
2-nitroaniline		<1900	<2700	<6700	<3600	<4400	<6000	<3900	<2100	<1900	<3200	<3100
dimethylphthalate		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
acenaphthylene		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
2,6-dinitrotoluene		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
3-nitroaniline		<1900	<2700	<6700	<3600	<4400	<6000	<3900	<2100	<1900	<3200	<3100
acenaphthene		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
2.4-dinitrophenol		<1900	<2700	<6700	<3600	<4400	<6000	<3900	<2100	<1900	<3200	<3100
4-nitrophenol		<1900	<2700	<6700	<3600	<4400	<6000	<3900	<2100	<1900	<3200	<3100
dibenzofuran		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630

Semi-Vol. Organic Compounds	NYSDEC	SAMPLES	AMPLES									
	RSCOs (ppb)	BG1-S-05-12	TT-2-S-05-72	TT-12-S-05-30	TT-12-S-05-156	TT-16-S-05-0	TT-16-S-05-84	TT-16-S-05-90	TT-16-S-05-180	TT-17-S-05-30	TT-32-S-05-90	TT-39-S-05-48
2,4-dinitrotoluene		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
diethylphthalate		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
4-chlorophenyl-phenylether		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
fluorene		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
4-nitroaniline		<1900	<2700	<6700	<3600	<4400	<6000	<3900	<2100	<1900	<3200	<3100
4,6-dinitro-2-methylphenol		<1900	<2700	<6700	<3600	<4400	<6000	<3900	<2100	<1900	<3200	<3100
n-nitrosodiphenylamine		<370	<540	<1300	<720	<880	<1200	<780	<430	57j	<640	<630
4-bromophenyl-phenylether		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
hexachlorobenzene		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
pentachlorophenol		<1900	<2700	<6700	<3600	<4400	<6000	<3900	<2100	<1900	<3200	<3100
phenanthrene	50000	<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	100j
anthracene		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
carbazole		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
di-n-butylphthalate	8100	<370	<540	<1300	<720	<880	130j	<780	<430	<380	<640	<630
fluoranthene		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
pyrene		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
butylbenzylphthalate		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
3,3'-dichlorobenzidine		<750	<1100	<2700	<1400	<1800	<2400	<1600	<850	<770	<1300	<1300
benzo(a)anthracene		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
chrysene		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	68j
bis(2-ethylehexyl)phthalate	50000	<370	<540	140j	<720	190j	<1200	<780	50j	<380	<640	<630
di-n-octylphthalate		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
benzo(b)fluoranthene	1100	<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	81j
benzo(k)fluoranthene	1100	<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	76j
benzo(a)pyrene	61	<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	84j
indeno(1,2,3-cd)pyrene	3200	<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	150j
bibenzo(a,h)anthracene		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
benzo(g,h,i)perylene	50000	<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	160j
benzaldehyde		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
acetophenone		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
caprolactam		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
biphenyl		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630
atrazine		<370	<540	<1300	<720	<880	<1200	<780	<430	<380	<640	<630

PCBs/Pesticides	NYSDEC SAMPLES											
	RSCOs (ppb)	BG1-S-05-12	TT-2-S-05-72	TT-12-S-05-30	TT-12-S-05-156	TT-16-S-05-0	TT-16-S-05-84	TT-16-S-05-90	TT-16-S-05-180	TT-17-S-05-30	TT-32-S-05-90	TT-39-S-05-48
alpha-BHC	110	<1.9	<2.7	9.9	<3.6	<4.4	<6.0	<3.9	<2.1	<1.9	<3.2	<3.1
beta-BHC		<1.9	<2.7	<6.7	<3.6	<4.4	<6.0	<3.9	<2.1	<1.9	<3.2	<3.1
delta-BHC		<1.9	<2.7	<6.7	<3.6	<4.4	<6.0	<3.9	<2.1	<1.9	<3.2	<3.1
gamma-BHC (Lindane)		<1.9	<2.7	<6.7	<3.6	<4.4	<6.0	<3.9	<2.1	<1.9	<3.2	<3.1
heptachlor		<1.9	<2.7	<6.7	<3.6	<4.4	<6.0	<3.9	<2.1	<1.9	<3.2	<3.1
aldrin		<1.9	<2.7	<6.7	<3.6	<4.4	<6.0	<3.9	<2.1	<1.9	<3.2	<3.1
heptachlor epoxide		<1.9	<2.7	<6.7	<3.6	<4.4	<6.0	<3.9	<2.1	<1.9	<3.2	<3.1
endosulfan I		<1.9	<2.7	<6.7	<3.6	<4.4	<6.0	<3.9	<2.1	<1.9	<3.2	<3.1
dieldrin		<3.7	<5.4	<13.3	<7.2	<8.8	<11.9	<7.8	<4.3	<3.8	<6.4	<6.3
4,4'-DDE		<3.7	<5.4	<13.3	<7.2	<8.8	<11.9	<7.8	<4.3	<3.8	<6.4	<6.3
endrin		<3.7	<5.4	<13.3	<7.2	<8.8	<11.9	<7.8	<4.3	<3.8	<6.4	<6.3
endosulfan II		<3.7	<5.4	<13.3	<7.2	<8.8	<11.9	<7.8	<4.3	<3.8	<6.4	<6.3
4,4'-DDD		<3.7	<5.4	<13.3	<7.2	<8.8	<11.9	<7.8	<4.3	<3.8	<6.4	<6.3
endosulfan sulfate		<3.7	<5.4	<13.3	<7.2	<8.8	<11.9	<7.8	<4.3	<3.8	<6.4	<6.3
4,4'-DDT		<3.7	<5.4	<13.3	<7.2	<8.8	<11.9	<7.8	<4.3	<3.8	<6.4	<6.3
methoxychlor		<19	<27	14j	<36	<44	<60	<39	<21	<19	<32	<31
endrin ketone		<3.7	<5.4	<13.3	<7.2	<8.8	<11.9	<7.8	<4.3	<3.8	<6.4	<6.3
endrin aldehyde		<3.7	<5.4	<13.3	<7.2	<8.8	<11.9	<7.8	<4.3	<3.8	<6.4	<6.3
alpha chlordane		<1.9	<2.7	<6.7	<3.6	<4.4	<6.0	<3.9	<2.1	<1.9	<3.2	<3.1
gamma chlordane		<1.9	<2.7	<6.7	<3.6	<4.4	<6.0	<3.9	<2.1	<1.9	<3.2	<3.1
toxaphene		<37	<54	<130	<72	<88	<120	<78	<43	<38	<64	<63
Aroclor 1016		<37	<54	<130	<72	<88	<120	<78	<43	<38	<64	<63
Aroclor 1221		<75	<110	<270	<140	<180	<240	<160	<85	<77	<130	<130
Aroclor 1232		<37	<54	<130	<72	<88	<120	<78	<43	<38	<64	<63
Aroclor 1242		<37	<54	<130	<72	<88	<120	<78	<43	<38	<64	<63
Aroclor 1248		<37	<54	<130	<72	<88	<120	<78	<43	<38	<64	<63
Aroclor 1254		<37	<54	<130	<72	<88	<120	<78	<43	<38	<64	<63
Aroclor 1260		<37	<54	<130	<72	<88	<120	<78	<43	<38	<64	<63

Metals (mg/kg)	East US Site	NYSDEC	Backgro	und																	
	Background (SB)	RSCOs	BG1-S-0	5-12	TT-2-3-05-72	2	TT-12-S-05-30	TT-1	2-S-05-156	TT-16-S-	05-0	TT-16-S-05-84	TT	-16-S-05-90	TT-16-S-0	5-180	TT-17-S-0	J5-30	TT-32-S	-05-90	TT-39-S-05-48
aluminum	33,000	SB		9030		6110	922	2	2170		710	294	0	1520		4660		7030		1510	25300
antimony	not avail.	SB		5.2		19.4	<13.2	<7.2			9.6	19.	.5	21.1		19.1	<3.8		<0.64		<6.3
arsenic	3 - 12	7.5 or SB	<0.88		<1.3		<3.1	<1.7		<2.0		<2.8	<1	.8	<0.99		<0.90			2.7	<1.5
barium	15 - 600	300 or SB		21.2		34	23.6	6	25.7		17	27.	.4	18.9		18.8		48.2		19.2	85.3
beryllium	0 - 1.75	0.16 or SB		0.12	<0.13		<0.32	<0.18	8	<0.21		<0.29	<0	.18	<0.10		<0.09		<0.15		2.8
cadmium	0.1 - 1	1 or SB		0.064	<0.065		0.43	3	0.23		0.33	0.4	1	0.31	<0.051		<0.05			0.15	<0.08
calcium	130 - 35,000	SB		2420	9	1900	1980		353000		1940	14700	0	260000		4960		296000		349000	5720
chromium	1.5 - 40	10 or SB		7.8		10.4	4.9	9	4.7		3.6	6.	.2	2.5		7		12.9		2	21.1
cobalt	2.5 - 60	30 or SB		4.8		4.1	<3.3	<1.8		<2.1		<2.9	<1	.9		4.2		4.8	<1.6		12.
copper	1 - 50	25 or SB		1.8		1.6	3.3	3	2.9		3.4	7.	.7	1.8	<0.51			9.5	<0.77		15.0
iron	2,000 - 555,000	2,000 or SB		9840		7840	982	2	1120		1100	155	60	865		8030		13100		749	70400
lead	4-61r; 200-500 u	SB	<0.63		<0.90		11.5	5	6.5		2.4	6.	.2	2.9	<0.71		<0.65			1.1	<1.1
magnesium	100 - 5,000	SB		1500		2070	158	3	2390		598	112	20	888		2150		3790		1140	1530
manganese	50 - 5,000	SB		212		125	37.8	3	41		53.8	61.	.5	54.7		83.3		237		23.7	129
mercury	0.001 - 0.2	0.1	<0.056		<0.081		<0.2	<0.1	1	<0.13		<0.18	<0	.12	<0.064		<0.058		<0.096		<0.095
nickel	0.5 - 25	13 or SB	<0.84		<1.2		<3.0	<1.6		<1.9		<2.6	<1	.7	<0.94		<0.85		<1.4		<1.4
potassium	8,500 - 43,000	SB		183		588	750	)	205		345	35	8	191		396		1020		159	3120
selenium	0.1 - 3.9	2 or SB	<1.0		<1.5		<3.7	<2.0		<2.4		<3.3	<2	.1	<1.2		<1.1		<1.8		<1.7
silver	not avail.	SB	<0.61		<0.87		<2.2	<1.2		<1.4		<1.9	<1	.2	<0.69		<0.62		<1.0		<1.0
sodium	6,000 - 8,000	SB		121		1460	470	)	6210		259	246	60	3990		276		434		5330	6320
thallium	not avail.	SB	<1.1		<1.6		<3.8	<2.1		<2.5		<3.4	<2	.2	<1.2		<1.1		<1.9		<1.8
vanadium	1 - 300	150 or SB		9.8		10	20.4	1	7.5		8	28.	.7	76.3		7		11.4		62.3	22.1
zinc	9 - 50	20 or SB		23.4		22.6	97.8	3	17.2		75.1	10	00	28.7		16.7		217		6.3	104
cyanide (mg/kg)			<0.11		<0.13		<0.38	<0.19	9	<0.26		<0.36	<0	.23	<0.097		<0.099		<0.16		<0.16
Volatile Organic Compounds	NYSDEC	SAMPLES																			
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	RSCOs (ppb)	B-11	B-12	B-13	B-62	MW-4 soil	MW-6 soil														
chloromethane		<25	<18	<12	<11	<17	<21														
bromomethane		<25	<18	<12	<11	<17	<21														
vinyl chloride		<25	<18	<12	<11	<17	<21														
chloroethane	1900	<25	<18	<12	<11	10j	<21														
methylene chloride	100	<25	<18	<12	<11	30b	<21														
acetone	200	<25	19	18	<11	<17	<21														
carbon disulfide		<25	<18	<12	<11	<17	<21														
1,1-dichloroethene		<25	<18	<12	<11	<17	<21														
1,1-dichloroethane		<25	<18	<12	<11	<17	<21														
1,2-dichloroethene-trans		<25	<18	<12	<11	<17	<21														
1,2-dichloroethene-cis		<25	<18	<12	<11	<17	<21														
chloroform		<25	<18	<12	<11	<17	<21														
1,2-dichloroethane		<25	<18	<12	<11	<17	<21														
2-butanone		<25	<18	<12	<11	<17	<21														
1,1,1-trichloroethane		<25	<18	<12	<11	<17	<21														
carbon tetrachloride		<25	<18	<12	<11	<17	<21														
bromodichloromethane		<25	<18	<12	<11	<17	<21														
1,2-dichloropropane		<25	<18	<12	<11	<17	<21														
cis-1.3-dichloropropene		<25	<18	<12	<11	<17	<21														
trichloroethene		<25	<18	<12	<11	<17	<21														
dibromochloromethane		<25	<18	<12	<11	<17	<21														
1 1 2-trichloroethane		<25	<18	<12	<11	<17	<21														
henzene		<25	<18	<12	<11	<17	<21														
trans-1 3-dichloropropene		<25	<18	<12	<11	<17	<21														
hromoform		<25	<18	<12	<11	<17	<21														
4-methyl-2-pentanone		<25	<18	<12	<11	<17	<21														
2-hexanone		<25	<18	<12	<11	<17	<21														
terachloroethene		<25	<18	<12	<11	<17	<21														
1 1 2 2-tetrachloroethane		<25	<18	<12	<11	<17	<21														
toluono		<25	<18	<12	<11	<17	<21														
chlorohenzene		<25	<18	<12	<11	<17	<21														
athulhanzana		<25	<18	<12	~11	<17	~21 ~21														
eturopo		~25	<10 ~10	~12	-11	~17	~21														
		~25	<10 ~10	~12	~11	~17	~21														
o_vulene		~25	<18	<12	211	~17	~21														
o-xylene		~25	<10 ~10	~12	~11	~17	~21														
dichlorodifluoromethane		~25	<10 ~10	~12	211	~17	~21														
		<20 <05	<10	<12	<11 211	< 17	52 I 201														
methyl acetate		<20	<18	<12	<11	< 17	<zi -01</zi 														
ITEON 113		<20	< 18	<12 -10	<11	< 17	<zi -01</zi 														
		<20 -05	< 18	<12	<11	< 17	SZ 1														
cyclonexane		<20 -05	< 18	<12	<11	< 17	SZ 1														
		<25	<18	<12	<11	<17	<21														
		<25	<18	<12	<11	<17	<21														
1,3-dichlorobenzene		<25	<18	<12	<11	<17	<21														
isopropylbenzene		<25	<18	<12	<11	<17	<21														
1,4-dichlorobenzene		<25	<18	<12	<11	<17	<21														
1,2-dichlorobenzene		<25	<18	<12	<11	<17	<21														
1,2-dibromo-3-chloro-propane		<25	<18	<12	<11	<17	<21														
1 2 4-trichlorobenzene		<25	<18	<12	<11	<17	<21														

Semi-Vol. Organic Compounds	NYSDEC	SAMPLES					
	RSCOs (ppb)	B-11	B-12	B-13	B-62	MW-4 soil	MW-6 soil
phenol		<830	<580	<420	<360	<560	<690
bis(2-chloroethyl)ether		<830	<580	<420	<360	<560	<690
2-chlorophenol		<830	<580	<420	<360	<560	<690
2-methylphenol		<830	<580	<420	<360	<560	<690
bis(2-chloroisopropyl)ether		<830	<580	<420	<360	<560	<690
4-methylphenol		<830	<580	<420	<360	<560	<690
n-Nitroso-di-n-propylamine		<830	<580	<420	<360	<560	<690
hexachloroethane		<830	<580	<420	<360	<560	<690
nitrobenzene		<830	<580	<420	<360	<560	<690
isophorone		<830	<580	<420	<360	<560	<690
2-nitrophenol		<830	<580	<420	<360	<560	<690
2,4-dimethylphenol		<830	<580	<420	<360	<560	<690
bis(2-chloroethoxy)methane		<830	<580	<420	<360	<560	<690
2,4-dichlorophenol		<830	<580	<420	<360	<560	<690
naphthalene		<830	<580	<420	<360	<560	<690
4-chloroaniline		<830	<580	<420	<360	<560	<690
hexachlorobutadiene		<830	<580	<420	<360	<560	<690
4-chloro-3-methylphenol		<830	<580	<420	<360	<560	<690
2-methylnaphthalene		<830	<580	<420	<360	<560	<690
hexachlorocyclopentadiene		<830	<580	<420	<360	<560	<690
2,4,6-trichlorophenol		<830	<580	<420	<360	<560	<690
2,4,5-trichlorophenol		<830	<580	<420	<360	<560	<690
2-chloronaphthalene		<830	<580	<420	<360	<560	<690
2-nitroaniline		<4200	<2900	<2100	<1800	<2800	<3500
dimethylphthalate		<830	<580	<420	<360	<560	<690
acenaphthylene		<830	<580	<420	<360	<560	<690
2,6-dinitrotoluene		<830	<580	<420	<360	<560	<690
3-nitroaniline		<4200	<2900	<2100	<1800	<2800	<3500
acenaphthene		<830	<580	<420	<360	<560	<690
2,4-dinitrophenol		<4200	<2900	<2100	<1800	<2800	<3500
4-nitrophenol		<4200	<2900	<2100	<1800	<2800	<3500
dibenzofuran		<830	<580	<420	<360	<560	<690

Semi-Vol. Organic Compounds	NYSDEC	SAMPLES					
	RSCOs (ppb)	B-11	B-12	B-13	B-62	MW-4 soil	MW-6 soil
2,4-dinitrotoluene		<830	<580	<420	<360	<560	<690
diethylphthalate		<830	<580	<420	<360	<560	<690
4-chlorophenyl-phenylether		<830	<580	<420	<360	<560	<690
fluorene		<830	<580	<420	<360	<560	<690
4-nitroaniline		<4200	<2900	<2100	<1800	<2800	<3500
4,6-dinitro-2-methylphenol		<4200	<2900	<2100	<1800	<2800	<3500
n-nitrosodiphenylamine		<830	<580	<420	<360	<560	<690
4-bromophenyl-phenylether		<830	<580	<420	<360	<560	<690
hexachlorobenzene		<830	<580	<420	<360	<560	<690
pentachlorophenol		<4200	<2900	<2100	<1800	<2800	<3500
phenanthrene		<830	<580	<420	<360	<560	<690
anthracene		<830	<580	<420	<360	<560	<690
carbazole		<830	<580	<420	<360	<560	<690
di-n-butylphthalate		<830	<580	<420	<360	<560	<690
fluoranthene		<830	<580	<420	<360	<560	<690
pyrene		<830	<580	<420	<360	<560	<690
butylbenzylphthalate		<830	<580	<420	<360	<560	<690
3,3'-dichlorobenzidine		<1700	<1200	<830	<720	<1100	<1400
benzo(a)anthracene		<830	<580	<420	<360	<560	<690
chrysene		<830	<580	<420	<360	<560	<690
bis(2-ethylehexyl)phthalate		<830	<580	<420	<360	<560	<690
di-n-octylphthalate		<830	<580	<420	<360	<560	<690
benzo(b)fluoranthene		<830	<580	<420	<360	<560	<690
benzo(k)fluoranthene		<830	<580	<420	<360	<560	<690
benzo(a)pyrene	61	<830	<580	630	<360	<560	<690
indeno(1,2,3-cd)pyrene		<830	<580	<420	<360	<560	<690
bibenzo(a,h)anthracene		<830	<580	<420	<360	<560	<690
benzo(g,h,i)perylene		<830	<580	<420	<360	<560	<690
benzaldehyde		<830	<580	<420	<360	<560	<690
acetophenone		<830	<580	<420	<360	<560	<690
caprolactam		<830	<580	<420	<360	<560	<690
biphenyl		<830	<580	<420	<360	<560	<690
atrazine		<830	<580	<420	<360	<560	<690

PCBs/Pesticides	NYSDEC	SAMPLES					
	RSCOs (ppb)	B-11	B-12	B-13	B-62	MW-4 soil	MW-6 soil
alpha-BHC		<4.2	<2.9	<2.1	<1.8	<2.8	<3.5
beta-BHC		<4.2	<2.9	<2.1	<1.8	<2.8	<3.5
delta-BHC		<4.2	<2.9	<2.1	<1.8	<2.8	<3.5
gamma-BHC (Lindane)		<4.2	<2.9	<2.1	<1.8	<2.8	<3.5
heptachlor		<4.2	<2.9	<2.1	<1.8	<2.8	<3.5
aldrin		<4.2	<2.9	<2.1	<1.8	<2.8	<3.5
heptachlor epoxide		<4.2	<2.9	<2.1	<1.8	<2.8	<3.5
endosulfan I		<4.2	<2.9	<2.1	<1.8	<2.8	<3.5
dieldrin		<8.3	<5.8	<4.2	<3.6	<5.6	<6.9
4,4'-DDE		<8.3	<5.8	<4.2	<3.6	<5.6	<6.9
endrin		<8.3	<5.8	<4.2	<3.6	<5.6	<6.9
endosulfan II		<8.3	<5.8	<4.2	<3.6	<5.6	<6.9
4,4'-DDD		<8.3	<5.8	<4.2	<3.6	<5.6	<6.9
endosulfan sulfate		<8.3	<5.8	<4.2	<3.6	<5.6	<6.9
4,4'-DDT		<8.3	<5.8	<4.2	<3.6	<5.6	<6.9
methoxychlor		<42	<29	<21	<18	<28	<35
endrin ketone		<8.3	<5.8	<4.2	<3.6	<5.6	<6.9
endrin aldehyde		<8.3	<5.8	<4.2	<3.6	<5.6	<6.9
alpha chlordane		<4.2	<2.9	<2.1	<1.8	<2.8	<3.5
gamma chlordane		<4.2	<2.9	<2.1	<1.8	<2.8	<3.5
toxaphene		<83	<58	<42	<36	<56	<69
Aroclor 1016		<83	<58	<42	<36	<56	<69
Aroclor 1221		<170	<120	<83	<72	<110	<140
Aroclor 1232		<83	<58	<42	<36	<56	<69
Aroclor 1242		<83	<58	<42	<36	<56	<69
Aroclor 1248		<83	<58	<42	<36	<56	<69
Aroclor 1254		<83	<58	<42	<36	<56	<69
Aroclor 1260		<83	<58	<42	<36	<56	<69

Metals (mg/kg)	East US Site	NYSDEC	SAMPLES							
	Background (SB)	RSCOs	B-11		B-12		B-13	B-62	MW-4 soil	MW-6 soil
aluminum	33,000	SB		1300		2610	5440	3480	2170	2010
antimony	not avail.	SB	<8.2		<5.8		<4.1	<3.6	<5.5	8
arsenic	3 - 12	7.5 or SB	<2.0		<1.4		<0.98	<0.85	<1.3	1.6
barium	15 - 600	300 or SB		18.7		20	24.8	15.7	17.3	21.9
beryllium	0 - 1.75	0.16 or SB	<0.20		<0.14		0.13	0.15	<0.13	<0.17
cadmium	0.1 - 1	1 or SB	<0.10		<0.070		<0.050	<0.043	<0.067	<0.083
calcium	130 - 35,000	SB		176000	13	38000	3330	4870	117000	139000
chromium	1.5 - 40	10 or SB		2.4		3.4	5.8	3.5	2.7	4
cobalt	2.5 - 60	30 or SB	<2.1			2	3.6	3.3	1.9	<1.7
copper	1 - 50	25 or SB		4.5		2.5	1.7	3.1	2	4.3
iron	2,000 - 555,000	2,000 or SB		1050		4040	6770	7120	4230	3290
lead	4-61r; 200-500 u	SB		6.9		1.1	<0.70	<0.61	2.7	8.7
magnesium	100 - 5,000	SB		2220		2460	1440	2870	1960	2610
manganese	50 - 5,000	SB		43.6		80.2	72	180	85.5	106
mercury	0.001 - 0.2	0.1	<0.12		<0.088		<0.062	<0.054	<0.083	<0.10
nickel	0.5 - 25	13 or SB	<1.8			2.4	5.8	4.4	2	2.3
potassium	8,500 - 43,000	SB		366		381	177	291	353	417
selenium	0.1 - 3.9	2 or SB	<2.3		<1.6		<1.2	<1.0	<1.5	<1.9
silver	not avail.	SB	<1.4		<0.95		<0.68	<0.59	<0.90	<1.1
sodium	6,000 - 8,000	SB		3310		1910	256	89.1	2260	2020
thallium	not avail.	SB	<2.4		<1.7		<1.2	<1.0	<1.6	<2.0
vanadium	1 - 300	150 or SB	<4.9			3.6	-	6.6	4.1	<4.1
zinc	9 - 50	20 or SB		27.5		14.4	15.2	17.6	13.4	21.7
cyanide (mg/kg)			<0.24		<0.17		<0.11	<0.11	<0.14	<0.16

Volatile Organic Compounds		Upgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
	Class GA Stds.	Well MW-2	Well MW-1	Well MW-3	Well MW-4	Well MW-5	Well MW-6	Well MW-7
a b la va va a tha a a		-10	-10	-10	-10	-10	-10	-10
chioromethane		<10	<10	<10	<10	<10	<10	<10
bromomethane		<10	<10	<10	<10	<10	<10	<10
vinyl chloride		<10	<10	<10	<10	<10	<10	<10
chloroethane		<10	<10	<10	<10	<10	<10	<10
methylene chloride		<10	<10	<10	<10	<10	<10	<10
acetone		<10	<10	<10	<10	<10	<10	<10
carbon disulfide		<10	<10	<10	<10	<10	<10	<10
1,1-dichloroethene		<10	<10	<10	<10	<10	<10	<10
1,1-dichloroethane		<10	<10	<10	<10	<10	<10	<10
1,2-dichloroethene-trans		<10	<10	<10	<10	<10	<10	<10
1,2-dichloroethene-cis		<10	<10	<10	<10	<10	<10	<10
chloroform		<10	<10	<10	<10	<10	<10	<10
1,2-dichloroethane		<10	<10	<10	<10	<10	<10	<10
2-butanone		<10	<10	<10	<10	<10	<10	<10
1,1,1-trichloroethane		<10	<10	<10	<10	<10	<10	<10
carbon tetrachloride		<10	<10	<10	<10	<10	<10	<10
bromodichloromethane		<10	<10	<10	<10	<10	<10	<10
1,2-dichloropropane		<10	<10	<10	<10	<10	<10	<10
cis-1,3-dichloropropene		<10	<10	<10	<10	<10	<10	<10
trichloroethene		<10	<10	<10	<10	<10	<10	<10
dibromochloromethane		<10	<10	<10	<10	<10	<10	<10
1.1.2-trichloroethane		<10	<10	<10	<10	<10	<10	<10
benzene		<10	<10	<10	<10	<10	<10	<10
trans-1.3-dichloropropene		<10	<10	<10	<10	<10	<10	<10
bromoform		<10	<10	<10	<10	<10	<10	<10
4-methyl-2-pentanone		<10	<10	<10	<10	<10	<10	<10
2-hexanone		<10	<10	<10	<10	<10	<10	<10
terachloroethene		<10	<10	<10	<10	<10	<10	<10
1 1 2 2-tetrachloroethane		<10	<10	<10	<10	<10	<10	<10
toluene		<10	<10	<10	<10	<10	<10	<10
chlorobenzene		<10	<10	<10	<10	<10	<10	<10
ethylbenzene		<10	<10	<10	<10	<10	<10	<10
styrene		<10	<10	<10	<10	<10	<10	<10
m n-xylenes		<10	<10	<10	<10	<10	<10	<10
		<10	<10	<10	<10	<10	<10	<10
mothyl t butyl othor		<10	<10	<10	<10	<10	<10	<10
dichlorodifluoromothano		<10	<10	<10	<10	<10	<10	<10
mothyl apotato		<10	<10	<10	<10	<10	<10	<10
froon 112		<10	<10	<10	<10	<10	<10	<10
trichlarafluaramathana		<10	<10	<10	<10	<10	<10	<10
		<10	<10	<10	<10	<10	<10	<10
		<10	<10	<10	<10	<10	<10	<10
		<10	< 10	<10	< 10	<10	<10	<10
1,2-dibromoetnane		<10	<10	<10	<10	<10	<10	<10
1,3-dichlorobenzene		<10	<10	<10	<10	<10	<10	<10
		<10	< 10	< 10	< 10	<10	<10	< 10
1,4-dichlorobenzene		<10	<10	<10	<10	<10	<10	<10
1,2-dichlorobenzene		<10	<10	<10	<10	<10	<10	<10
1,2-dibromo-3-chloro-propane		<10	<10	<10	<10	<10	<10	<10
1.2.4-trichlorobenzene		<10	<10	<10	<10	<10	<10	<10

Semi-Vol. Organic Compounds		Upgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
	Class GA Stds.	Well MW-2	Well MW-1	Well MW-3	Well MW-4	Well MW-5	Well MW-6	Well MW-7
phenol		<5	<5	<5	<5	<5	<5	<5
bis(2-chloroethyl)ether		<5	<5	<5	<5	<5	<5	<5
2-chlorophenol		<5	<5	<5	<5	<5	<5	<5
2-methylphenol		<5	<5	<5	<5	<5	<5	<5
bis(2-chloroisopropyl)ether		<5	<5	<5	<5	<5	<5	<5
4-methylphenol		<5	<5	<5	<5	<5	<5	<5
n-Nitroso-di-n-propylamine		<5	<5	<5	<5	<5	<5	<5
hexachloroethane		<5	<5	<5	<5	<5	<5	<5
nitrobenzene		<5	<5	<5	<5	<5	<5	<5
isophorone		<5	<5	<5	<5	<5	<5	<5
2-nitrophenol		<5	<5	<5	<5	<5	<5	<5
2,4-dimethylphenol		<5	<5	<5	<5	<5	<5	<5
bis(2-chloroethoxy)methane		<5	<5	<5	<5	<5	<5	<5
2,4-dichlorophenol		<5	<5	<5	<5	<5	<5	<5
naphthalene		<5	<5	<5	<5	<5	<5	<5
4-chloroaniline		<5	<5	<5	<5	<5	<5	<5
hexachlorobutadiene		<5	<5	<5	<5	<5	<5	<5
4-chloro-3-methylphenol		<5	<5	<5	<5	<5	<5	<5
2-methylnaphthalene		<5	<5	<5	<5	<5	<5	<5
hexachlorocyclopentadiene		<5	<5	<5	<5	<5	<5	<5
2,4,6-trichlorophenol		<5	<5	<5	<5	<5	<5	<5
2,4,5-trichlorophenol		<5	<5	<5	<5	<5	<5	<5
2-chloronaphthalene		<5	<5	<5	<5	<5	<5	<5
2-nitroaniline		<25	<25	<25	<25	<25	<25	<25
dimethylphthalate		<5	<5	<5	<5	<5	<5	<5
acenaphthylene		<5	<5	<5	<5	<5	<5	<5
2,6-dinitrotoluene		<5	<5	<5	<5	<5	<5	<5
3-nitroaniline		<25	<25	<25	<25	<25	<25	<25
acenaphthene		<5	<5	<5	<5	<5	<5	<5
2,4-dinitrophenol		<25	<25	<25	<25	<25	<25	<25
4-nitrophenol		<25	<25	<25	<25	<25	<25	<25
dibenzofuran	<u> </u>	<5	<5	<5	<5	<5	<5	<5

Semi-Vol. Organic Compounds		Upgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
	Class GA Stds.	Well MW-2	Well MW-1	Well MW-3	Well MW-4	Well MW-5	Well MW-6	Well MW-7
2,4-dinitrotoluene		<5	<5	<5	<5	<5	<5	<5
diethylphthalate		14	5	<5	<5	<5	<5	<5
4-chlorophenyl-phenylether		<5	<5	<5	<5	<5	<5	<5
fluorene		<5	<5	<5	<5	<5	<5	<5
4-nitroaniline		<25	<25	<25	<25	<25	<25	<25
4,6-dinitro-2-methylphenol		<25	<25	<25	<25	<25	<25	<25
n-nitrosodiphenylamine		<5	<5	<5	<5	<5	<5	<5
4-bromophenyl-phenylether		<5	<5	<5	<5	<5	<5	<5
hexachlorobenzene		<5	<5	<5	<5	<5	<5	<5
pentachlorophenol		<25	<25	<25	<25	<25	<25	<25
phenanthrene		<5	<5	<5	<5	<5	<5	<5
anthracene		<5	<5	<5	<5	<5	<5	<5
carbazole		<5	<5	<5	<5	<5	<5	<5
di-n-butylphthalate		15	12	<5	<5	<5	<5	<5
fluoranthene		2j	<5	<5	<5	<5	<5	<5
pyrene		2j	<5	<5	<5	<5	<5	<5
butylbenzylphthalate		13	13	<5	<5	<5	<5	<5
3,3'-dichlorobenzidine		<10	<10	<10	<10	<10	<10	<10
benzo(a)anthracene		<5	<5	<5	<5	<5	<5	<5
chrysene		<5	<5	<5	<5	<5	<5	<5
bis(2-ethylehexyl)phthalate		8j	2j	<5	<5	<5	<5	<5
di-n-octylphthalate		<5	<5	<5	<5	<5	<5	<5
benzo(b)fluoranthene		<5	<5	<5	<5	<5	<5	<5
benzo(k)fluoranthene		<5	<5	<5	<5	<5	<5	<5
benzo(a)pyrene		<5	<5	<5	<5	<5	<5	<5
indeno(1,2,3-cd)pyrene		<5	<5	<5	<5	<5	<5	<5
bibenzo(a,h)anthracene		<5	<5	<5	<5	<5	<5	<5
benzo(g,h,i)perylene		<5	<5	<5	<5	<5	<5	<5
benzaldehyde		<5	<5	<5	<5	<5	<5	<5
acetophenone		<5	<5	<5	<5	<5	<5	<5
caprolactam		<5	<5	<5	<5	<5	<5	<5
biphenyl		<5	<5	<5	<5	<5	<5	<5
atrazine		<5	<5	<5	<5	<5	<5	<5

PCBs/Pesticides		Upgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient	Downgradient
	Class GA Stds.	Well MW-2	Well MW-1	Well MW-3	Well MW-4	Well MW-5	Well MW-6	Well MW-7
alpha-BHC		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
beta-BHC		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
delta-BHC		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
gamma-BHC (Lindane)		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
heptachlor		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
aldrin		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
heptachlor epoxide		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
endosulfan I		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
dieldrin		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDE		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endosulfan II		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDD		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endosulfan sulfate		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
4,4'-DDT		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
methoxychlor		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
endrin ketone		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
endrin aldehyde		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
alpha chlordane		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
gamma chlordane		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
toxaphene		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1016		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1221		<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Aroclor 1232		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1242		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1248		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1254		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aroclor 1260		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Metals (ug/L)		Upg	radient	Downg	gradient	Dow	ngradient	Downgradi	ent	Downgradient	Down	gradient	Down	gradient
	Class GA Stds.	Wel	I MW-2	Well	MW-1	We	II MW-3	Well MW-	4	Well MW-5	Well	MW-6	Wel	I MW-7
aluminum			2810		37100		1250	6	720	32300		44000		132
antimony	3		31.3		22.3	<16.5			39.8	109	9	29.8		32.6
arsenic	2.5	<3.9		<3.9			4		4.1	4.8	<3.9		<3.9	
barium	1000		110		360		26		76.8	460	)	406		19.1
beryllium	3	<0.40			0.56	<0.40		<0.40		1.2	2	0.54	<0.40	
cadmium	5	<0.20		<0.20		<0.20		<0.20		1.7	<0.20		<0.20	
calcium			90500		175000		172000	270	000	256000		1740000		54300
chromium	50		4.5		60.6	<2.3			12.2	47.2	2	85.9	<2.3	
cobalt		<4.1			26.5	<4.1			4.8	21.4		36.5	<4.1	
copper	200		6.8		37.9		3.6		9.7	74.6	5	79	<2.0	
iron	300		4660		55500		2950	14	800	36900	)	63500		2030
lead	25	<2.8		<2.8		<2.8			9.9	32	2	106	<2.8	
magnesium	35000		31900		31700		39400	26	800	60700		65300		16700
manganese	300		179		1110		71.4		540	2270	)	1490		99.6
mercury	0.0007	<0.10			0.1	<0.10		<0.10		<0.10		0.21	<0.10	
nickel	100	<3.7			36.4	<3.7		<3.7		42.2	2	44.7	<3.7	
potassium			7060		14000		10900	ş	230	18300		18800		4180
selenium	10	<4.6		<4.6		<4.6		<4.6		<4.6	<4.6		<4.6	
silver	50	<2.7		<2.7		<2.7		<2.7		<2.7	<2.7		<2.7	
sodium	20000		28500		67700		55300	39	700	83100		54000		19400
thallium	0.5		15.6		18.5		21.6		11.1	16.1		16.8		8.3
vanadium		<9.8			47.6	<9.8			14.9	172		68.7	<9.8	
zinc	2000	<1.3			114	<1.3			31.4	741		278	<1.3	
cyanide (ug/l)	200	<10		<10		<10		<10		<10	<10		<10	
pН	6.5-8.5		7.4		6.8		6.6		6.7	6.9		10.5		6.2
turbidity			90		840		59		440	410		350	1	14

Volatile Organic Compounds	SD-1-SU-05-6	SD-1-SU-05-18	SD-2-SU-05-6	SD-2-SU-05-18	SD-3-SU-05-6	SD-3-SU-05-18	SD-4-SU-05-6	SD-4-SU-05-18	SD-5-SU-05-6	SD-5-SU-05-18	SD-6-SU-05-6	SD-6-SU-05-18
chloromethane	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
bromomethane	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
vinvl chloride	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
chloroethane	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
methylene chloride	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
acetone	<11	<12	<13	<11	<12	<12	9bi	11i	9bi	<13	<12	<11
carbon disulfide	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
1.1-dichloroethene	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
1 1-dichloroethane	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
1 2-dichloroethene-trans	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
1 2-dichloroethene-cis	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
chloroform	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
1.2-dichloroethane	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
2-butanone	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
1 1 1-trichloroethane	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
carbon tetrachloride	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
bromodichloromethane	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
1 2-dichloropropape	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
cis-1 3-dichloropropene	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
trichloroethene	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
dibromochloromethane	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
1 1 2-trichloroethane	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
henzene	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
trans-1 3-dichloropropene	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
bromoform	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
4-methyl-2-pentanone	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
2-hevanone	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
terachloroethene	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
1 1 2 2-tetrachloroethane	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
toluene	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
chlorobenzene	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
ethylbenzene	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
styrene	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
m p-yvlenes	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
o-yylene	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
methyl t-hutyl ether	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
dichlorodifluoromethane	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
methyl acetate	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
freen 113	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
trichlorofluoromethane	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
cyclohexane	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
methylcyclohexane	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
1 2-dibromoethane	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
1.3-dichlorobenzene	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
isonronylbenzene	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
1 4-dichlorobenzene	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
1.2-dichlorobenzene	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
1 2-dibromo-3-chloro-propane	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
1.2.4-trichlorobenzene	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11

Semi-Volatile Organic Compounds												
	SD-1-SU-05-6	SD-1-SU-05-18	SD-2-SU-05-6	SD-2-SU-05-18	SD-3-SU-05-6	SD-3-SU-05-18	SD-4-SU-05-6	SD-4-SU-05-18	SD-5-SU-05-6	SD-5-SU-05-18	SD-6-SU-05-6	SD-6-SU-05-18
phenol	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
bis(2-chloroethyl)ether	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
2-chlorophenol	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
2-methylphenol	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
bis(2-chloroisopropyl)ether	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
4-methylphenol	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
n-Nitroso-di-n-propylamine	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
hexachloroethane	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
nitrobenzene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
isophorone	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
2-nitrophenol	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
2,4-dimethylphenol	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
bis(2-chloroethoxy)methane	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
2,4-dichlorophenol	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
naphthalene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
4-chloroaniline	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
hexachlorobutadiene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
4-chloro-3-methylphenol	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
2-methylnaphthalene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
hexachlorocyclopentadiene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
2,4,6-trichlorophenol	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
2,4,5-trichlorophenol	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
2-chloronaphthalene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
2-nitroaniline	<1800	<2100	<2100	<1800	<2000	<2100	<2100	<2100	<2100	<2200	<2000	<1800
dimethylphthalate	<360	<410	<430	<350	<410	<420	<420	1700	<430	<430	<400	<370
acenaphthylene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
2,6-dinitrotoluene	<360	<410	<430	<350	<410	<420	<420	540	<430	<430	<400	<370
3-nitroaniline	<1800	<2100	<2100	<1800	<2000	<2100	<2100	<2100	<2100	<2200	<2000	<1800
acenaphthene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
2,4-dinitrophenol	<1800	<2100	<2100	<1800	<2000	<2100	<2100	<2100	<2100	<2200	<2000	<1800
4-nitrophenol	<1800	<2100	<2100	<1800	<2000	<2100	<2100	<2100	<2100	<2200	<2000	<1800
dibenzofuran	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370

Semi-Volatile Organic Compounds												
	SD-1-SU-05-6	SD-1-SU-05-18	SD-2-SU-05-6	SD-2-SU-05-18	SD-3-SU-05-6	SD-3-SU-05-18	SD-4-SU-05-6	SD-4-SU-05-18	SD-5-SU-05-6	SD-5-SU-05-18	SD-6-SU-05-6	SD-6-SU-05-18
2,4-dinitrotoluene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
diethylphthalate	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
4-chlorophenyl-phenylether	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
fluorene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
4-nitroaniline	<1800	<2100	<2100	<1800	<2000	<2100	<2100	<2100	<2100	<2200	<2000	<1800
4,6-dinitro-2-methylphenol	<1800	<2100	<2100	<1800	<2000	<2100	<2100	<2100	<2100	<2200	<2000	<1800
n-nitrosodiphenylamine	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
4-bromophenyl-phenylether	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
hexachlorobenzene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
pentachlorophenol	<1800	<2100	<2100	<1800	<2000	<2100	<2100	<2100	<2100	<2200	<2000	<1800
phenanthrene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
anthracene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
carbazole	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
di-n-butylphthalate	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
fluoranthene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
pyrene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	57j	<370
butylbenzylphthalate	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
3,3'-dichlorobenzidine	<710	<820	<850	<710	<810	<830	<840	<850	<850	<870	<800	<740
benzo(a)anthracene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
chrysene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
bis(2-ethylehexyl)phthalate	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
di-n-octylphthalate	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
benzo(b)fluoranthene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
benzo(k)fluoranthene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
benzo(a)pyrene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
indeno(1,2,3-cd)pyrene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
bibenzo(a,h)anthracene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
benzo(g,h,i)perylene	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
benzaldehyde	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
acetophenone	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
caprolactam	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
biphenyl	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370
atrazine	<360	<410	<430	<350	<410	<420	<420	<430	<430	<430	<400	<370

PCBs/Pesticides	SD-1-SU-05-6	SD-1-SU-05-18	SD-2-SU-05-6	SD-2-SU-05-18	SD-3-SU-05-6	SD-3-SU-05-18	SD-4-SU-05-6	SD-4-SU-05-18	SD-5-SU-05-6	SD-5-SU-05-18	SD-6-SU-05-6	SD-6-SU-05-18
alpha-BHC	<1.8	<21	<21	<1.8	<2.0	<2 1	<2 1	<2 1	<2 1	<22	<2.0	<1.9
beta-BHC	<1.8	<2.1	<2.1	<1.8	<2.0	<2.1	<2.1	<2.1	<2.1	<2.2	<2.0	<1.9
delta-BHC	<1.8	<2.1	<2.1	<1.8	<2.0	<2.1	<2.1	<2.1	<2.1	<2.2	<2.0	<1.9
gamma-BHC (Lindane)	<1.8	<2.1	<2.1	<1.8	<2.0	<2.1	<2.1	<2.1	<2.1	<2.2	<2.0	<1.9
heptachlor	<1.8	<2.1	<2.1	<1.8	<2.0	<2.1	<2.1	<2.1	<2.1	<2.2	<2.0	<1.9
aldrin	<1.8	<2.1	<2.1	<1.8	<2.0	<2.1	<2.1	<2.1	<2.1	<2.2	<2.0	<1.9
heptachlor epoxide	<1.8	<2.1	<2.1	<1.8	<2.0	<2.1	<2.1	<2.1	<2.1	<2.2	<2.0	<1.9
endosulfan I	<1.8	<2.1	<2.1	<1.8	<2.0	<2.1	<2.1	<2.1	<2.1	<2.2	<2.0	<1.9
dieldrin	<3.6	<4.1	<4.3	<3.5	<4.1	<4.2	<4.2	<4.3	<4.3	<4.3	<4.0	<3.7
4,4'-DDE	<3.6	<4.1	<4.3	<3.5	<4.1	<4.2	<4.2	<4.3	<4.3	<4.3	<4.0	<3.7
endrin	<3.6	<4.1	<4.3	<3.5	<4.1	<4.2	<4.2	<4.3	<4.3	<4.3	<4.0	<3.7
endosulfan II	<3.6	<4.1	<4.3	<3.5	<4.1	<4.2	<4.2	<4.3	<4.3	<4.3	<4.0	<3.7
4,4'-DDD	<3.6	<4.1	<4.3	<3.5	<4.1	<4.2	<4.2	<4.3	<4.3	<4.3	<4.0	<3.7
endosulfan sulfate	<3.6	<4.1	<4.3	<3.5	<4.1	<4.2	<4.2	<4.3	<4.3	<4.3	<4.0	<3.7
4,4'-DDT	<3.6	<4.1	<4.3	<3.5	<4.1	<4.2	<4.2	<4.3	<4.3	<4.3	<4.0	<3.7
methoxychlor	<18	<21	<21	<18	<20	<21	<21	<21	<21	<22	<20	<19
endrin ketone	<3.6	<4.1	<4.3	<3.5	<4.1	<4.2	<4.2	<4.3	<4.3	<4.3	<4.0	<3.7
endrin aldehyde	<3.6	<4.1	<4.3	<3.5	<4.1	<4.2	<4.2	<4.3	<4.3	<4.3	<4.0	<3.7
alpha chlordane	<1.8	<2.1	<2.1	<1.8	<2.0	<2.1	<2.1	<2.1	<2.1	<2.2	<2.0	<1.9
gamma chlordane	<1.8	<2.1	<2.1	<1.8	<2.0	<2.1	<2.1	<2.1	<2.1	<2.2	<2.0	<1.9
toxaphene	<36	<41	<43	<35	<41	<42	<42	<43	<43	<43	<40	<37
Aroclor 1016	<36	<41	<43	<35	<41	<42	<42	<43	<43	<43	<40	<37
Aroclor 1221	<71	<82	<85	<71	<81	<83	<84	<85	<85	<87	<80	<74
Aroclor 1232	<36	<41	<43	<35	<41	<42	<42	<43	<43	<43	<40	<37
Aroclor 1242	<36	<41	<43	<35	<41	<42	<42	<43	<43	<43	<40	<37
Aroclor 1248	<36	<41	<43	<35	<41	<42	<42	<43	<43	<43	<40	<37
Aroclor 1254	<36	<41	<43	<35	<41	<42	<42	<43	<43	<43	<40	<37
Aroclor 1260	<36	<41	<43	<35	<41	<42	<42	<43	<43	<43	<40	<37

<b>River Sediment Samples</b>																						
Metals (ug/L)	Guidance Lowest	Guidance Severe																			1	
	Effect Level (ppm)	Effect Level (ppm)	SD-1-SU-05-6	SD-1-SU	J-05-18	SD-2-SU-05-6	6 SE	D-2-SU-05-18	SD-3-SU-05	5-6	SD-3-SU-05-1	8	SD-4-SU-05-6	SD-4-SU-0	5-18	SD-5-SU-05-6	SD-5-S	U-05-18	SD-6-S	U-05-6	SD-6-SU	J-05-18
																					l	
aluminum			2160	)	2240	153	30	2290	1	810	175	50	1950		2240	216	0	2810		1680	1	1700
antimony	2	25	<3.5	<4.1		<4.2		7.2	<4.0		<4.1		16.5		6	<4.2		68.5	<4.0		<3.7	
arsenic	6	33	<0.83	<0.96		<1.0	<0.	.83	<0.95		<0.98	-	<0.99	<1.0		<1.0	<1.0		<0.94		<0.87	
barium			8.2	2	9	5	5.4	14.5		7.2	5	5.3	6.9		8.6	7.	4	9.4		6	I	7.5
beryllium			<0.085	<0.099		<0.10		0.23	<0.098		<0.10	-	<0.10	<0.10		<0.10	<0.10		<0.096		<0.089	
cadmium	0.6	9	<0.043	<0.049		<0.051	<0.	.043	<0.049		<0.050		<0.051	<0.051		<0.051	<0.052		<0.048		<0.044	
calcium			2420	)	6310	94	41	1130	1	970	295	50	1280		2400	127	0	1220		2070	1	1870
chromium	26	110	3	3	1.1	1	1.9	1.4	<0.56		2	2.5	1.7		2.9	2.	5	4.4		2.3	1	1.1
cobalt			2.4	1	1.8	1	1.5	2.5		1.8	1	1.5	2.1		2.2	2.	2	2.8	5	1.8	I	1.7
copper	16	110	<0.43	<0.49		0.0	62	0.67	(	0.66	<0.50		0.59		0.71	0.9	2	0.62	<0.48		1	15.4
iron	20000	40000	5590	)	4200	364	40	8360	4	360	381	10	4910		5660	517	0	8030		4010	1	5040
lead	31	110	<0.60	<0.69		<0.72	<0.	.60	<0.68		<0.70		<0.71	<0.72		3.	3 <0.73		<0.67		I	7.5
magnesium			1700	D	1170	68	87	1100	1	390	175	50	1220		1440	107	0	1390		737	I	640
manganese	460	1100	86.6	6	73.1	49	9.7	113	4	48.6	44	1.4	54.8		70.1	59.	8	79.7	r	50.3	1	48.8
mercury	0.15	1.3	<0.053	<0.062		<0.064	<0.	.053	<0.061		<0.062		<0.063	<0.064		<0.064	<0.065		<0.060		<0.056	
nickel	16	50	2.7	7	1.9	1	1.5 < 0.	.79		1.5	1	1.8	1.9		2.7	2.	5	16.6	5	1.9	I	0.97
potassium			72.3	3	104	44	4.1	164		122	54	1.6	57.2		71.2	72.	5	55	5	52.5	I	43.3
selenium			<0.98	<1.1		<1.2	<0.	.98	<1.1		<1.2		<1.2	<1.2		<1.2	<1.2		<1.1		<1.0	
silver	1	2.2	<0.57	<0.67		<0.69	<0.	.57	<0.66		<0.68		<0.68	<0.69		<0.69	<0.70		<0.65		<0.60	
sodium			139	9	184	19	99	151		200	19	93	203		203	24	3	247		112	1	99.8
thallium			<1.0	<1.2		<1.2	<1.	.0	<1.2		<1.2		<1.2	<1.2		<1.2	<1.2		<1.2		<1.1	
vanadium			5.1	1	3.8	3	3.2	4.7		3.8	3	3.2	3.9		4.3	4.	1	6.4		3.6	ł	2.8
zinc	120	270	16	6	9.2	10	0.2	17.9	1	10.6	7	7.4	12.4		13	15.	1	15.8	5	11.3	ł	17.4
cyanide (mg/kg)			<0.11	<0.12		<0.11	<0.	.10	<0.11		<0.12		<0.09	<0.08		<0.11	<0.12		<0.09		<0.09	

Volatile Organic Compounds	NYSDEC							
·····	RSCOs (ppb)	WM-1-S-05-54	WM-2-S-05-12	WM-2-S-05-24	WM-3-S-05-12	WM-3-S-05-24	WM-4-S-05-12	WM-4-S-05-24
a la la compa d la compa		.00	-00	.10	.10	-00	-04	.10
		<88	<23	<18	<18	<20	<21	<18
bromomethane		<88	<23	<18	<18	<20	<21	<18
vinyi chioride		<88	<23	<18	<18	<20	<21	<18
chloroethane		<88	<23	<18	<18	<20	<21	<18
methylene chloride		<88	<23	<18	<18	<20	<21	<18
acetone		<88	<23	<18	<18	<20	<21	<18
carbon disulfide		<88	<23	<18	<18	<20	<21	<18
1,1-dichloroethene		<88	<23	<18	<18	<20	<21	<18
1,1-dichloroethane		<88	<23	<18	<18	<20	<21	<18
1,2-dichloroethene-trans		<88	<23	<18	<18	<20	<21	<18
1,2-dichloroethene-cis		<88	<23	<18	<18	<20	<21	<18
chloroform		<88	<23	<18	<18	<20	<21	<18
1,2-dichloroethane		<88	<23	<18	<18	<20	<21	<18
2-butanone		<88	<23	<18	<18	<20	<21	<18
1,1,1-trichloroethane		<88	<23	<18	<18	<20	<21	<18
carbon tetrachloride		<88	<23	<18	<18	<20	<21	<18
bromodichloromethane		<88	<23	<18	<18	<20	<21	<18
1.2-dichloropropane		<88	<23	<18	<18	<20	<21	<18
cis-1 3-dichloropropene		<88	<23	<18	<18	<20	<21	<18
trichloroethene		<88	<23	<18	<18	<20	<21	<18
dibromochloromethane		<88	<23	<18	<18	<20	<21	<18
1 1 2-trichloroethane		<88	<23	<18	<18	<20	<21	<18
henzene		<88	<23	<18	<18	<20	<21	<18
trans_1.3_dichloropropene		<88	<23	<18	<18	<20	<21	<18
bromoform		<88	<23	<18	<18	<20	<21	<18
4-methyl 2-pentanone		<88	<23	<18	<18	<20	<21	<18
2 hovenono		<00	~23	<10	<10	<20	<21	<10
toraphloraethana		<00	~23	<10	<10	<20	~21	<10
		<00	~23	<10	<10	<20	~21	<10
toluono		<00 <00	~20	< 10	<10	<20	~21 <21	<10 <19
loidene		<b>~00</b>	~20	<10 <10	<10	<20	~21	<10 <10
		<b>~00</b>	~20	<10 <10	<10	<20	~21	<10 <10
etnyibenzene		<88	<23	< 18	< 18	<20	< <u>21</u>	< 18
styrene		<88	<23	<18	<18	<20	<21	<18
m,p-xylenes		<88	<23	<18	<18	<20	<21	<18
o-xylene		<88	<23	<18	<18	<20	<21	<18
methyl t-butyl ether		<88	<23	<18	<18	<20	<21	<18
dichlorodifluoromethane		<88	<23	<18	<18	<20	<21	<18
methyl acetate		<88	<23	<18	<18	<20	<21	<18
freon 113		<88	<23	<18	<18	<20	<21	<18
trichlorofluoromethane		<88	<23	<18	<18	<20	<21	<18
cyclohexane		<88	<23	<18	<18	<20	<21	<18
methylcyclohexane		<88	<23	<18	<18	<20	<21	<18
1,2-dibromoethane		<88	<23	<18	<18	<20	<21	<18
1,3-dichlorobenzene		<88	<23	<18	<18	<20	<21	<18
isopropylbenzene		<88	<23	<18	<18	<20	<21	<18
1,4-dichlorobenzene		<88	<23	<18	<18	<20	<21	<18
1,2-dichlorobenzene		<88	<23	<18	<18	<20	<21	<18
1,2-dibromo-3-chloro-propane		<88	<23	<18	<18	<20	<21	<18
124-trichlorobenzene		<88	<23	<18	<18	<20	<21	<18

Semi-Vol. Organic Compounds	NYSDEC							
	RSCOs (ppb)	WM-1-S-05-54	WM-2-S-05-12	WM-2-S-05-24	WM-3-S-05-12	WM-3-S-05-24	WM-4-S-05-12	WM-4-S-05-24
phenol		<580	<780	<580	<580	<670	<710	<610
bis(2-chloroethyl)ether		<580	<780	<580	<580	<670	<710	<610
2-chlorophenol		<580	<780	<580	<580	<670	<710	<610
2-methylphenol		<580	<780	<580	<580	<670	<710	<610
bis(2-chloroisopropyl)ether		<580	<780	<580	<580	<670	<710	<610
4-methylphenol		<580	<780	<580	<580	<670	<710	<610
n-Nitroso-di-n-propylamine		<580	<780	<580	<580	<670	<710	<610
hexachloroethane		<580	<780	<580	<580	<670	<710	<610
nitrobenzene		<580	<780	<580	<580	<670	<710	<610
isophorone		<580	<780	<580	<580	<670	<710	<610
2-nitrophenol		<580	<780	<580	<580	<670	<710	<610
2,4-dimethylphenol		<580	<780	<580	<580	<670	<710	<610
bis(2-chloroethoxy)methane		<580	<780	<580	<580	<670	<710	<610
2,4-dichlorophenol		<580	<780	<580	<580	<670	<710	<610
naphthalene		<580	<780	<580	<580	<670	<710	<610
4-chloroaniline		<580	<780	<580	<580	<670	<710	<610
hexachlorobutadiene		<580	<780	<580	<580	<670	<710	<610
4-chloro-3-methylphenol		<580	<780	<580	<580	<670	<710	<610
2-methylnaphthalene		<580	<780	<580	<580	<670	<710	<610
hexachlorocyclopentadiene		<580	<780	<580	<580	<670	<710	<610
2,4,6-trichlorophenol		<580	<780	<580	<580	<670	<710	<610
2,4,5-trichlorophenol		<580	<780	<580	<580	<670	<710	<610
2-chloronaphthalene		<580	<780	<580	<580	<670	<710	<610
2-nitroaniline		<2900	<3900	<2900	<2900	<3300	<3500	<3000
dimethylphthalate		<580	<780	<580	<580	<670	<710	<610
acenaphthylene		<580	<780	<580	<580	<670	<710	<610
2,6-dinitrotoluene		<580	<780	<580	<580	<670	<710	<610
3-nitroaniline		<2900	<3900	<2900	<2900	<3300	<3500	<3000
acenaphthene		<580	<780	<580	<580	<670	<710	<610
2,4-dinitrophenol		<2900	<3900	<2900	<2900	<3300	<3500	<3000
4-nitrophenol		<2900	<3900	<2900	<2900	<3300	<3500	<3000
dibenzofuran		<580	<780	<580	<580	<670	<710	<610

Semi-Vol. Organic Compounds	NYSDEC							
	RSCOs (ppb)	WM-1-S-05-54	WM-2-S-05-12	WM-2-S-05-24	WM-3-S-05-12	WM-3-S-05-24	WM-4-S-05-12	WM-4-S-05-24
2,4-dinitrotoluene		<580	<780	<580	<580	< 670	<710	<610
diethylphthalate		<580	<780	<580	<580	<670	<710	<610
4-chlorophenyl-phenylether		<580	<780	<580	<580	<670	<710	<610
fluorene		<580	<780	<580	<580	<670	<710	<610
4-nitroaniline		<2900	<3900	<2900	<2900	<3300	<3500	<3000
4,6-dinitro-2-methylphenol		<2900	<3900	<2900	<2900	<3300	<3500	<3000
n-nitrosodiphenylamine		<580	<780	<580	<580	<670	<710	<610
4-bromophenyl-phenylether		<580	<780	<580	<580	<670	<710	<610
hexachlorobenzene	410	<580	<780	<580	<580	<670	<710	270j
pentachlorophenol		<2900	<3900	<2900	<2900	<3300	<3500	<3000
phenanthrene		<580	<780	<580	<580	<670	<710	<610
anthracene		<580	<780	<580	<580	<670	<710	<610
carbazole		<580	<780	<580	<580	<670	<710	<610
di-n-butylphthalate	8100	<580	<780	<580	<580	<670	79j	<610
fluoranthene	50000	<580	<780	<580	<580	<670	<710	79j
pyrene		<580	<780	<580	<580	<670	<710	<610
butylbenzylphthalate		<580	<780	<580	<580	<670	<710	<610
3,3'-dichlorobenzidine		<1200	<1600	<1200	<1200	<1300	<1400	<1200
benzo(a)anthracene		<580	<780	<580	<580	<670	<710	<610
chrysene		<580	<780	<580	<580	<670	<710	<610
bis(2-ethylehexyl)phthalate	50000	<580	<780	<580	<580	<670	<710	110j
di-n-octylphthalate		<580	<780	<580	<580	<670	<710	<610
benzo(b)fluoranthene		<580	<780	<580	<580	<670	<710	<610
benzo(k)fluoranthene		<580	<780	<580	<580	<670	<710	<610
benzo(a)pyrene		<580	<780	<580	<580	<670	<710	<610
indeno(1,2,3-cd)pyrene		<580	<780	<580	<580	<670	<710	<610
bibenzo(a,h)anthracene		<580	<780	<580	<580	<670	<710	<610
benzo(g,h,i)perylene		<580	<780	<580	<580	<670	<710	<610
benzaldehyde		<580	<780	<580	<580	<670	<710	74j
acetophenone		<580	<780	<580	<580	<670	<710	<610
caprolactam		<580	<780	<580	<580	<670	<710	<610
biphenyl		<580	<780	<580	<580	<670	<710	<610
atrazine		<580	<780	<580	<580	<670	<710	<610

PCBs/Pesticides	NYSDEC							
	RSCOs (ppb)	WM-1-S-05-54	WM-2-S-05-12	WM-2-S-05-24	WM-3-S-05-12	WM-3-S-05-24	WM-4-S-05-12	WM-4-S-05-24
alpha-BHC		<2.9	<3.9	<2.9	<2.9	<3.3	<3.5	<3.0
beta-BHC		<2.9	<3.9	<2.9	<2.9	<3.3	<3.5	<3.0
delta-BHC		<2.9	<3.9	<2.9	<2.9	<3.3	<3.5	<3.0
gamma-BHC (Lindane)		<2.9	<3.9	<2.9	<2.9	<3.3	<3.5	<3.0
heptachlor		<2.9	<3.9	<2.9	<2.9	<3.3	<3.5	<3.0
aldrin		<2.9	<3.9	<2.9	<2.9	<3.3	<3.5	<3.0
heptachlor epoxide		<2.9	<3.9	<2.9	<2.9	<3.3	<3.5	<3.0
endosulfan I		<2.9	<3.9	<2.9	<2.9	<3.3	<3.5	<3.0
dieldrin		<5.8	<7.8	<5.8	<5.8	<6.7	<7.1	<6.1
4,4'-DDE	2100	<5.8	3.7jp	<5.8	<5.8	<6.7	<7.1	<6.1
endrin		<5.8	<7.8	<5.8	<5.8	<6.7	<7.1	<6.1
endosulfan II		<5.8	<7.8	<5.8	<5.8	<6.7	<7.1	<6.1
4,4'-DDD		<5.8	<7.8	<5.8	<5.8	<6.7	<7.1	<6.1
endosulfan sulfate		<5.8	<7.8	<5.8	<5.8	<6.7	<7.1	<6.1
4,4'-DDT		<5.8	<7.8	<5.8	<5.8	<6.7	<7.1	<6.1
methoxychlor		<29	<39	<29	<29	<33	<35	<30
endrin ketone		<5.8	<7.8	<5.8	<5.8	<6.7	<7.1	<6.1
endrin aldehyde		<5.8	<7.8	<5.8	<5.8	<6.7	<7.1	<6.1
alpha chlordane		<2.9	<3.9	<2.9	<2.9	<3.3	<3.5	<3.0
gamma chlordane		<2.9	<3.9	<2.9	<2.9	<3.3	<3.5	<3.0
toxaphene		<58	<78	<58	<58	<67	<71	<61
Aroclor 1016		<58	<78	<58	<58	<67	<71	<61
Aroclor 1221		<120	<160	<120	<120	<130	<140	<120
Aroclor 1232		<58	<78	<58	<58	<67	<71	<61
Aroclor 1242		<58	<78	<58	<58	<67	<71	<61
Aroclor 1248		<58	<78	<58	<58	<67	<71	<61
Aroclor 1254		<58	<78	<58	<58	<67	<71	<61
Aroclor 1260		<58	<78	<58	<58	<67	<71	<61

Metals (mg/kg)	East US Site	NYSDEC							
	Background (SB)	RSCOs	WM-1-S-05-54	WM-2-S-05-12	WM-2-S-05-24	WM-3-S-05-12	WM-3-S-05-24	WM-4-S-05-12	WM-4-S-05-24
aluminum	33,000	SB	6640	3560	2270	2090	2880	4410	3290
antimony	not avail.	SB	24.1	21	8	3 <5.8	<6.6	<7.0	10.8
arsenic	3 - 12	7.5 or SB	<1.4	<1.8	<1.4	<1.4	<1.6	<1.7	<1.4
barium	15 - 600	300 or SB	192	53.6	28.5	5 55	37.2	50.7	74
beryllium	0 - 1.75	0.16 or SB	1.6	š <0.19	<0.14	<0.14	<0.16	<0.17	<0.15
cadmium	0.1 - 1	1 or SB	0.47	1.1	0.37	0.37	0.46	0.85	4.5
calcium	130 - 35,000	SB	4760	357000	391000	418000	285000	350000	297000
chromium	1.5 - 40	10 or SB	12.9	2.4	2.7	2.3	3.1	2.1	2.5
cobalt	2.5 - 60	30 or SB	7.9	) <1.9	<1.4	<1.4	<1.6	<1.7	<1.5
copper	1 - 50	25 or SB	17.1	8.8		1 3	3.3	6.9	29.1
iron	2,000 - 555,000	2,000 or SB	10500	3430	1430	1660	1450	3930	2040
lead	4-61r; 200-500 u	SB	<0.98	1.9	<0.98	1.8	1.4	2.6	11.1
magnesium	100 - 5,000	SB	509	4670	4100	3860	5770	5250	3300
manganese	50 - 5,000	SB	480	116	44.9	47.2	55.7	149	192
mercury	0.001 - 0.2	0.1	0.5	s <0.12	<0.088	<0.088	<0.099	<0.11	<0.092
nickel	0.5 - 25	13 or SB	6.7	19.9	9.7	12.8	4.2	13.2	16.3
potassium	8,500 - 43,000	SB	424	247	161	103	66.4	297	195
selenium	0.1 - 3.9	2 or SB	<1.6	<2.1	<1.6	<1.6	<1.8	<2.0	<1.7
silver	not avail.	SB	<0.94	1.7	<0.95	<0.95	<1.1	<1.1	<1.0
sodium	6,000 - 8,000	SB	96.6	2700	4490	6220	5200	4250	2260
thallium	not avail.	SB	<1.7	<2.2	<1.7	<1.7	<1.9	<2.0	<1.8
vanadium	1 - 300	150 or SB	22.9	8.6	3.8	6.1	<3.9	16.5	16.4
zinc	9 - 50	20 or SB	22.7	425	1020	490	385	5 522	205
cyanide (mg/kg)			0.28	8 <0.22	<0.17	<0.17	<0.18	<0.21	<0.18

Table –2 Supplemental SI Analytical Data Summary (Waste Media Samples and Bouquet River Sediment and Surface Water Samples)

# SURFACE WATER SAMPLES - SUPPLEMENTAL SI

Metals (ug/L)	Class C (or next							
	Applic.) Standard	SW-1-SU-7	SW-2-SU-7	SW-3-SU-7	SW-6-SU-7	SW-9-SU-7	SW-10-SU-7	SW-11-SU-7
								ļ
aluminum	100	79.3	71.1	65.1	106	73.9	108	127
antimony	3	54.2	<16.2	26.4	<16.2	<16.2	<16.2	<16.2
arsenic	2.5; 150	7.3	<2.4	7.4	3.7	3	<2.4	<2.4
barium	1000	6.9	6.5	7.1	6.9	7	7.5	8.5
beryllium	3; 11	<0.30	<0.30	<0.30	<0.30	0.36	<0.30	<0.30
cadmium	5	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
calcium		17600	17400	17900	17500	17700	16900	17200
chromium	50	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7	<2.7
cobalt	5	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90	<0.90
copper	200	3	6.5	5.6	10.8	8.6	2.7	11.9
iron	300	234	199	207	237	221	251	256
lead	25	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6	<1.6
magnesium	35000	4280	4270	4500	4310	4460	4330	4400
manganese	300	18.7	15.7	18.6	18	24.7	26.3	28.2
mercury	0.0007	0.21	<0.06	0.18	0.1	0.18	0.1	0.17
nickel	100	<0.90	<0.90	0.19	<0.90	<0.90	<0.90	<0.90
potassium		789	698	685	643	630	575	661
selenium	4.6; 100	8.4	3.2	4.9	<2.4	<2.4	<2.4	<2.4
silver	0.1	<1.8	<1.8	<1.8	1.9	<1.8	<1.8	<1.8
sodium	20000	6870	7300	6940	7570	8060	9750	9740
thallium	8	6.9	5.8	4.5	3.6	3.9	2	1.0
vanadium	14	<4.2	<4.2	<4.2	<4.2	<4.2	<4.2	<4.2
zinc	64.7; 2000	3.7	1.6	1.5	4.1	1.2	3.1	3.5
cyanide (ug/l)	200	<10	<10	<10	<10	<10	<10	<10
pH	6.5-8.5	6.8	7.2	7.4	7.6	7.5	7.4	7.
turbidity		2.4	1.5	1.7	5.8	2.2	2.9	3.4

# Sediment Samples - SUPPLEMENTAL SI

Metals (ug/L)	Guidance Lowest	Guidance Severe										
	Effect Level (ppm)	Effect Level (ppm)	SD-7-SU-07-6	SD-7-SU-07-18	SD-8-SU-07-6	SD-8-SU-07-18	SD-9-SU-07-6	SD-9-SU-07-18	SD-10-SU-07-6	SD-10-SU-07-18	SD-11-SU-07-6	SD-11-SU-07-18
aluminum			2230	3380	2130	3920	3330	3900	4950	3620	3890	4480
antimony	2	25	<4.2	<4.1	<4.1	<4.2	<3.3	<4.2	<4.2	<0.42	4.9	<4.2
arsenic	6	33	<0.62	<0.61	<0.61	<0.63	<0.5	<0.63	<0.63	<0.62	0.68	<0.63
barium			8.5	12.4	7.9	22	8.8	13.1	8.5	10.1	9.9	21.3
beryllium			<0.088	<0.08	<0.08	<0.08	<0.06	<0.08	<0.08	<0.08	<0.08	<0.08
boron			<1.9	<1.9	<1.9	<1.9	<1.5	<1.9	<1.9	<1.9	<2.0	<1.9
cadmium	0.6	9	<0.13	<0.13	<0.13	<0.13	<0.10	<013	<0.13	<0.13	<0.13	<0.13
calcium			1470	2260	1780	2100	2320	2130	3390	3220	2320	2940
chromium	26	110	<0.7	2.5	<0.69	1	1	1	1.8	2	1.3	1.3
cobalt			1.9	2.5	2	3.3	1.9	2.6	2.2	2.5	2.9	2.5
copper	16	110	0.64	1.3	1.3	0.82	0.52	0.52	1	0.77	<0.53	0.98
iron	20000	40000	4520	6600	4820	8990	5050	7950	5050	5580	7090	5230
lead	31	110	1	2.3	1.5	1.3	1.2	<0.42	<0.42	0.66	0.79	0.44
magnesium			965	1720	899	1900	1020	983	1030	1350	1480	1190
manganese	460	1100	43	78	41.5	88.2	47.1	90.8	36.6	45.7	59.6	37.3
mercury	0.15	1.3	<0.04	<0.04	<0.04	<0.04	<0.03	<0.04	<0.04	<0.04	<0.04	<0.04
nickel	16	50	2.1	3.6	2.4	3.1	1.9	2.2	3.1	2.9	3.1	2.7
potassium			86.2	140	100	143	150	131	136	171	161	181
selenium			<0.62	<0.61	<0.61	<0.63	<0.50	<0.63	<0.63	<0.62	<0.64	<0.63
silver	1	2.2	<0.46	<0.46	<0.46	<0.47	<0.37	<0.47	<0.47	<0.47	<0.48	<0.47
sodium			133	188	129	172	283	400	526	314	311	483
thallium			0.45	<0.41	<0.41	<0.42	<0.33	<0.42	<0.42	<0.41	<0.43	<0.42
vanadium			5.7	3.2	5.1	5.7	2.3	4.3	<1.1	2.7	3.1	1.1
zinc	120	270	13.1	18.6	12.9	20.6	13	14.6	11	14.9	17.3	17.6
cyanide (mg/kg)												

#### SOIL (WM) Samples - SUPPLEMENTAL SI

Metals (ug/L)	East US Site	NYSDEC	Background		TT-11	TT-7	TT-4	TT-24
	Background (SB)	RSCOs	BG1-S-05-12		WM-1-SU-07-10	WM-2-SU-07-6	WM-3-SU-07-9	WM-4-SU-07-8
aluminum	33,000	SB		9030	2950	1890	20200	3500
antimony	not avail.	SB		5.2	<4.2	<4.1	<4.6	<4.1
arsenic	3 - 12	7.5 or SB	<0.88		15	8.1	23.6	8.4
barium	15 - 600	300 or SB		21.2	76.1	40.3	448	50.7
beryllium	0 - 1.75	0.16 or SB		0.12	0.67	0.3	2.4	0.58
boron					<1.9	<1.9	<2.1	<1.9
cadmium	0.1 - 1	1 or SB		0.064	0.18	0.15	0.29	0.18
calcium	130 - 35,000	SB		2420	1590	1090	10400	2330
chromium	1.5 - 40	10 or SB		7.8	7.8	6.2	17.9	5.9
cobalt	2.5 - 60	30 or SB		4.8	4	4.8	15.9	3.4
copper	1 - 50	25 or SB		1.8	21.5	21.7	40.8	16.8
iron	2,000 - 555,000	2,000 or SB		9840	4870	3640	14400	4360
lead	4-61r; 200-500 u	SB	<0.63		12.1	16.9	13.8	18.2
magnesium	100 - 5,000	SB		1500	188	143	1480	395
manganese	50 - 5,000	SB		212	37.6	39.3	524	87.9
mercury	0.001 - 0.2	0.1	<0.056		0.33	0.24	0.99	0.31
nickel	0.5 - 25	13 or SB	<0.84		11.6	12.9	33.9	8.4
potassium	8,500 - 43,000	SB		183	172	148	3080	222
selenium	0.1 - 3.9	2 or SB	<1.0		1.5	1.6	<0.68	2
silver	not avail.	SB	<0.61		<0.47	<0.45	<0.51	<0.45
sodium	6,000 - 8,000	SB		121	50.3	42.7	236	87.5
thallium	not avail.	SB	<1.1		<0.42	<0.40	<0.45	<0.40
vanadium	1 - 300	150 or SB		9.8	22.1	18.2	32.4	11.8
zinc	9 - 50	20 or SB		23.4	12.9	13.1	70.1	16
cyanide (mg/kg)			<0.11					

Figure –1 Site Location and Site Plan



# ~ ELEVATION DATA ~

BORING No.	ELEVATION		TRENC	H No.	ELEVATION	TRENCH No.	ELEVATION	MONITORING
B-1	123.1			11-1	101.8	//-21	119.3	WELL NO.
B-2	122.4			Π–2	101.3	TT-22	104.8	MW-1
B-3	122.7			TT-3	103.5	Π-23	126.9	MW-2
R-4	114 5			TT4	102.1	TT-24	123.2	MW = 3
B-5	115.9			TT-5	102.4	TT-25	125.7	MW-4
B-6	108.9			TT-6	102.7	TT-26	121.9	MW_5
B-7	122.0			TT-7	107.6	TT-27	117.8	MW-6
B-8	1122			TT-8	101.9	TT28	125.0	MW-7
D 0	1112			TT-9	107.9	TT-29	114.0	
D-9 P-10	117.2			TT = 10	103.0	TT-30	118.0	
B-11	114.0			TT - 11	113.4	TT-31	125.2	
D-17 P-12	1145			TT-12	114 4	$\pi - 32$	115.5	
D-12	114.5			TT = 13	115.8	$\pi - 33$	125.5	
				TT 11	103.3	$\pi_{-34}$	1177	
				77. 15	119 7	11 35	110 1	
				TT 10	110.7	TT 30	119.4	
				11-10	114.5	11-30	124.2	
				Π-17	122.5	$\pi - 37$	122.0	
				TT 18	103.3	TT38	127.7	
				TT-19	126.7	TT39	122.3	
				TT-20	112.4	TT <b>-4</b> 0	124.9	

~ MAP REFERENCES ~

- #1. MAP OF SURVEY SHOWING PREMISES CONVEYED BY THE NEW YORK & PENNSTLIANIA CO., INC. TO CHAMPLAIN MILLS PROPERTIES, INC. BY BY SPENCER J. JOHNSTON, L.S., AND FREETICK W. VOLKMANN, L.S., SHEET NO. 2 OF J. DATED SEPTEMBER 11, 1962.
- #2. MAP OF SURVEY SHOWING PARCEL SET OFF FROM LANDS OF GEORGIA PACIFIC CORPORATION TO BE CONVEYED TO THE TOWN OF WILLSBORD BY SPENCER J. JOHNSTON, L.S., AND DATED SEPTEMBER 16, 1966. FILED IN THE ESSEX CO. CLERK'S OFFICE AS MAP #2042.
- #3. MAP OF SURVEY SHOWING "GRIST MILL PARCEL" SET OFF FROM LANDS OWNED BY GEORGIA PACIFIC CORPORATION, BY SPENCER J. JOHNSTON, L.S. SURVEY COMPLETED SEPTEMBER 16, 1966.
- MAP OF LANDS TO BE ACQUIRED BY THE STATE OF NEW YORK DEPARTMENT OF ENVIRONMENTAL CONSERVATION, BY KENNETH F. YOUSEY, L.S. SURVEY COMPLETED MARCH 1982, FILED IN THE ESSEX CO. CLERK'S OFFICE AS MAP #3198. #4.
- #5. MAP OF SURVEY PREPARED FOR THE TOWN OF WILLSBORO, BY KEVIN A. HALL, L.S., DATED NOVEMBER 2, 1992.
- #6. MAP OF SURVEY PREPARED FOR TOWN OF WILLSBORD AND EARTH SCIENCE ENGINEERING, P.C. BY KEVIN A. HALL, L.S., DATED AUGUST 29, 2005.

~ LEGEND ~

ELEVATION

118.5

126.5 114.5 116.7

103.0

114.3

102.3

	PROPERTY LINE AND CORNER MARKER AS DESCRIBED OR C.P. = COMPUTED POINT
() () () () () () () () () () () () () (	PROPERTY LINE ALONG EDGE OF RIVER
	CURRENT TITLE LINE
	10' CONTOUR INTERVAL
	2' CONTOUR INTERVAL
+ 116.3	SPOT ELEVATION
	CHAINLINK FENCELINE
	PAVED DRIVE OR ROAD
	UNPAVED DRIVE OR ROAD
	TRAIL OR PATH
	UTILITY POLE AND OVERHEAD WIRES
munimum	TREELINE
000000	LARGE BOULDERS

# *103* 🖸 MW **110**⊕ **B-**1 þ SD-X BG-

~ SA #1 MONITORING

CONCRETE #2 BORING AND

#3 RIVER SEDIN

# ~ NOTES ~

- 1 UNAUTHORIZED ALTERATION OR ADDITION TO A SURVEY MAP BEARING A LICENSED LAND SURVEYOR'S SEAL IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW.
- ONLY COPIES FROM THE ORIGINAL OF THIS SURVEY, SIGNED AND DATED IN RED INK AND MARKED WITH THE LAND SURVEYOR'S EMBOSSED SEAL SHALL BE CONSIDERED TO BE VALID TRUE COPIES. #2
- "ASSUMED ROAD BOUNDS" INDICATES THAT LIMITED WORK HAS BEEN DONE TO ATTEMPT TO DETERMINE THE TRUE LEGAL BOUNDS OF THE ROAD SHOWN HEREON. #3
- #4 WETLANDS, IF ANY, NOT SHOWN HEREON.
- #5 UNDERGROUND UTILITIES NOT SHOWN HEREON.
- ACREAGE IS SHOWN TO THE BANK OF THE BOQUET RIVER. TITLE TO THE BED OF THE RIVER MAY BE IN THE STATE. OWNERSHIP OF THE RIVER BED IS SUBJECT TO A LEGAL INTERPRETATION NOT UNDERTAKEN AS A PART OF THIS SURVEY. **#**6
- #7 MAPPING COMPILED BY TVGA CONSULTANTS(TVGA) USING PHOTOGRAMMETRIC METHODS. AERUL PHOTOGRAPHY FLOWN 30 NOV 2004. THIS MAPPING COMPILED IN ACCORDANCE WITH (NMAS) NATIONAL MAP ACCURACY STANDARDS FOR MAPS AT 1 INCH EQUALS 30 FT. SCALE.
- THE INFORMATION DEPICTED ON THIS MAP REPRESENTS THE RESULTS OF AERIAL MAPPING AND CAN ONLY BE CONSIDERED AS INDICATING THE GENERAL CONDITION EXISTING ON THE DATE OF PHOTOGRAPHY. #8
- #9 AREAS OF DENSE VEGETATION, SHADOWS OR SNOW MAY NOT MEET NATIONAL MAP ACCURACY STANDARDS (NMAS) AND WILL BE IDENTIFIED BY AN "OBSCURED" OUTLINED AND/OR DASHED CONTOURS, A FIELD CHECK MUST BE COMPLETED PRIOR TO ENGINEERING DESIGN AND/OR COMPUTATIONS.

PAGE No.	
1	SITE
2	ELEVA
3	SHEE
4	SHEE
5	SHEE
6	SHEE
7	SHEE
8	SHEE
9	SHEE
10	SHEE
11	GROL

~ SAMPL	ING LEGEND ~
103 A 3	TEST TRENCH AND ELEVATION
TT-18	
103 🖸 0	MONITORING WELL AND ELEVATION
MW-5	
<i>110</i> ⊕8	BORING AND ELEVATION
B-10	
ğ	RIVER SEDIMENT SAMPLE
SD-1	
×	BACKGROUND SAMPLE
<b>BG-1</b>	
H	WASTE MEDIA SAMPLE
WM-1	
~ SAMP	LING NOTES ~
CONCRETE BELOV	LOCK PORTION OF CAP.
BORING AND TES	T TRENCH ELEVATIONS TAKEN AT STAKE.
RIVER SEDIMENT	SAMPLING LOCATIONS APPROXIMATED
	CONTENTS
SITE L	OCATION PLAN AND MAP KEY ~ 1" = 150'
ELEVAT	TION DATA, LEGENDS, NOTES AND MAP REFERENCES
SHEET	$1 \sim 1'' = 50'$
SHEET	$2 \sim 1'' = 50'$

ET 3 ~ 1" = 50' ET 4 ~ 1" = 50' ET 5 ~ 1" = 50' ET 6 ~ 1" = 50' ET 7 ~ 1" = 50' ET 8 ~ 1" = 50' GROUNDWATER CONTOURS / FLOW DIRECTIONS ~ 1" = 150'

# Figure –2 Environmental Sampling Location Plan

















# Figure –3 Groundwater Contours and Flow Directions


Figure –4 Extent of Contamination





Appendix –A Supplemental SI Test Pit Excavation Logs

# BLACK ASH POND ENVIRONMENTAL RESTORATION PROJECT

# WILLSBORO, NY

# **BLACK ASH TEST PIT LOGS**

Hill Top Samples:

# TP-01

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	NO ASH
2-	Soil	

## TP-02

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-8	Black Ash	
8-	Soil	

## TP-03

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-14	Black Ash	
14-	Soil	

## TP-04

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-9	Black Ash	
9-	Soil	

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-16	Black Ash	
16-	Soil	

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-5	Black Ash	
5-8	Soil	
8-16	Black Ash	
16	Soil	

# TP-07

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-28	Black Ash	
28-	Soil	

# TP-08

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-4	Black Ash	
4-	Soil	

# TP-09

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-10	Black Ash	
10-	Soil	

# TP-10

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-8	Black Ash	
8-	Soil	

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-14	Black Ash	
14-	Soil	

TP-	12
-----	----

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-4	Black Ash	
4-	Soil	

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-4	Black Ash	
4-	Soil	

# TP-14

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-7	Soil with Pockets of Ash	Small pockets, mainly at
		surface
7-	Soil	

# TP-15

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-7	Soil with Pockets of Ash	Less ash pockets then at
		TP-14
7-	Soil	

# TP-16

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	NO ASH
2-	Soil	

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	NO ASH
2-	Soil	

TP-	1	8
-----	---	---

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-8	Black Ash	
8-	Soil	

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-5	Black Ash	
5-	Soil	

# TP-20

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-8	Black Ash	
8-	Soil	

# TP-21

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-6	Black Ash	
6-	Soil	

# TP-22

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	NO ASH
2-	Soil	

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	NO ASH
2-	Soil	

TP-2	24
------	----

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-7	Black Ash	
7-	Soil	

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-6	Soil with Ash Pockets	
6-	Soil	

# TP-26

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-4	Black Ash	
4-	Soil	

# TP-27

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	NO ASH
2-	Soil	

# TP-28

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-6	Soil with Patches of Ash	Fairly Large Patches
6-	Soil	

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-6	Soil with Patches of Ash	
6-	Soil	

<b>TP-30</b>	
--------------	--

DEPTH (in.)	SOIL HORIZON	NOTES
0-3	Forest Duff	
3-8	Black Ash	
8-	Soil	

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-5	Soil with Patches of Ash	Very Little Ash
5-	Soil	

# TP-32

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-5	Soil with Patches of Ash	Very Little Ash
5-	Soil	

# TP-33

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-6	Varying Depths of Ash with	2-4" Deep, Inconsistent
	Soil	
6-	Soil	

# TP-34

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	
2-	Soil	Traces of Ash at Soil
		Surface

# Hill Bottom Samples:

DEPTH (in.)	SOIL HORIZON	NOTES
0-20	Black Ash	No Forest Duff Covering, Seems to be the Result of a Slide
20-	Wet Clay	

DEPTH (in.)	SOIL HORIZON	NOTES
0-8	Forest Duff/Topsoil	
8-28	Black Ash	
28-	Soil	

## TP-37

DEPTH (in.)	SOIL HORIZON	NOTES
0-6	Ash	Right on Surface, Similar to
		TP-35
6-	Wet Clay	

# TP-38

DEPTH (in.)	SOIL HORIZON	NOTES
0-24	Black Ash	12-24" Mounds of Ash on
		Surface

## TP-39

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	NO ASH
2-	Soil	

DEPTH (in.)	SOIL HORIZON	NOTES
0-2	Forest Duff	NO ASH
2-	Soil	

Appendix –B Supplemental SI Analytical Data



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

Received ESE, P.C. Date\_

Earth Science Engineering 3271 Main Street Willsboro, New York 12996

Attention: Douglas Ferris



314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

## TITLE PAGE

On June 22, 2007 fourteen soil samples were received by Adirondack Environmental Services, Inc. from Earth Science Engineering at the Black Ash Pond - Willsboro site. These samples were analyzed for Metals in accordance with methodology as detailed by the contract. The project was completed on September 4, 2007.

Laboratory Manager

Date:  $\frac{q}{\psi/07}$ 



**Experience is the solution** 314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

# SAMPLE DATA

# SUMMARY PACKAGE

#### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Customer	Laboratory	*VOA	*BNA	*PCB	*Pest	*Metals	*Other
Sample	Sample	GC/MS	GC/MS	GC	GC		CN
Code	Code	Method	Method	Method	Method		
SD-7-SU-07-6	070622060-001					X	
SD-7-SU-07-18	070622060-002					X	
SD-8-SU-07-6	070622060-003					X	
SD-8-SU-07-18	070622060-004					Х	
SD-9-SU-07-6	070622060-005					X	
SD-9-SU-07-18	070622060-006					x	
SD-10-SU-07-6	070622060-007					Х	
SD-10-SU-07-18	070622060-008					X	
SD-11-SU-07-6	070622060-009					X	
SD-11-SU-07-18	070622060-010					X	
WM-1-SU-07-10	070622060-011					x	
WM-2-SU-07-6	070622060-012					X	
WM-3-SU-07-9	070622060-013					X	
WM-4-SU-07-8	070622060-014					X	

# SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY



Experience is the solution

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## **Case Narrative**

## Client: Earth Science Engineering - Black Ash Pond / Willsboro

Case: ESE 0702

## SDG: SD-7-SU-07-6

Laboratory Sample ID	Date Received	<u>VTSR</u>	<u>Matrix</u>
070622060-001	06/22/07	13:00	Soil
070622060-002	06/22/07	13:00	Soil
070622060-003	06/22/07	13:00	Soil
070622060-004	06/22/07	13:00	Soil
070622060-005	06/22/07	13:00	Soil
070622060-006	06/22/07	13:00	Soil
070622060-007	06/22/07	13:00	Soil
070622060-008	06/22/07	13:00	Soil
070622060-009	06/22/07	13:00	Soil
070622060-010	06/22/07	13:00	Soil
070622060-011	06/22/07	13:00	Soil
070622060-012	06/22/07	13:00	Soil
070622060-013	06/22/07	13:00	Soil
070622060-014	06/22/07	13:00	Soil
	Laboratory Sample ID 070622060-001 070622060-002 070622060-003 070622060-004 070622060-005 070622060-006 070622060-007 070622060-008 070622060-010 070622060-011 070622060-012 070622060-013 070622060-014	Laboratory Sample IDDate Received070622060-00106/22/07070622060-00206/22/07070622060-00306/22/07070622060-00406/22/07070622060-00506/22/07070622060-00606/22/07070622060-00706/22/07070622060-00806/22/07070622060-00906/22/07070622060-01006/22/07070622060-01106/22/07070622060-01206/22/07070622060-01306/22/07070622060-01406/22/07	Laboratory Sample IDDate ReceivedVTSR070622060-00106/22/0713:00070622060-00206/22/0713:00070622060-00306/22/0713:00070622060-00406/22/0713:00070622060-00506/22/0713:00070622060-00606/22/0713:00070622060-00706/22/0713:00070622060-00806/22/0713:00070622060-00906/22/0713:00070622060-01006/22/0713:00070622060-01106/22/0713:00070622060-01206/22/0713:00070622060-01306/22/0713:00070622060-01406/22/0713:00

## **Inorganics – Metals**

- 1) The soil samples received on 6/22/07 had a temperature of 6 °C.
- 2) The recovery for Aluminum, Calcium and Iron in the ICSA and the ICSAB check standards were outside the required limit. The required concentration for these analytes in the check standards is 500,000 ug/L and 200,000 ug/L, respectively. The linear range on this instrument for Aluminum, Calcium and Iron is 250,000 ug/L, 200,000 ug/L and 80,000 ug/L, respectively. At this level accurate recovery of Aluminum, Calcium and Iron in the check standards is not possible. No further action is required.
- 3) The digested spike recoveries for the elements Arsenic and Thallium on sample WM-4-SU-07-8 (AES sample number 070622060-014) were outside the required 75-125 % limits. A post digestion spike was performed and the recoveries were within acceptable limits. The results for these elements are flagged with an "N" as specified by the protocol. This indicates possible matrix interference.



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4) The elements Aluminum, Calcium, Iron, Magnesium, Manganese and Zinc for sample WM-4-SU-07-8 (AES sample number 070622060-014) did not meet the serial dilution criteria of 10 %. These elements are flagged with an "E" as required by the protocol. The "E" denotes an estimated value. This indicates a possible chemical or physical interference.

"I certify that this data package is in compliance with the terms and conditions of the protocol, both technically and for completeness, to the best of my knowledge, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Laboratory Manager

Date:  $\frac{q}{4/07}$ 



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"I certify that this data package is in compliance with the terms and conditions of the protocol, both technically and for completeness, to the best of my knowledge, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Laboratory Manager

Date: \_\_\_\_\_\_9/4/07

## NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Laboratory			Date Rec'd	Date	Date
Sample ID	Matrix	Metals Requested	at Lab	Prepared	Analyzed
070622060-001	WATER	ICP	6/22/07	6/29/07	7/18/07
		Мегсигу		6/29/07	6/30/07
070622060-002	WATER	ICP	6/22/07	6/29/07	7/18/07
		Мегсигу		6/29/07	6/30/07
070622060-003	WATER	ICP	6/22/07	6/29/07	7/18/07
-		Мегсигу		6/29/07	6/30/07
070622060-004	WATER	ICP	6/22/07	6/29/07	7/18/07
		Мегсшгу		6/29/07	6/30/07
070622060-005	WATER	ICP	6/22/07	6/29/07	7/18/07
		Mercury		6/29/07	6/30/07
			C/02/07	(10.0.10.7	
070622060-006	WATER	<u> </u>	6/22/07	6/29/07	7/18/07
		Mercury		6/29/07	6/30/07
070(000(0.007		IOD	(100/07	(100.105	64.80
0/0622060-007	WATER	ICP Manual	6/22/07	6/29/07	//18/07
		Mercury		0/29/07	6/30/07
070600060 008	WATED	נרים	6/00/07	6/20/07	7/10/07
070622000-008	WAIEK	Mercurar	0/22/07	6/29/07	//18/07
	ł ·		+	0/23/07	10/02/07
070622060-009	WATER	ICP	6/22/07	6/29/07	7/19/07
070022000-007	WATER	Mercury	0/22/07	6/29/07	6/30/07
		indidary.			0/50/07
070622060-010	WATER	ICP	6/22/07	6/29/07	7/18/07
070022000 010		Mercury		6/29/07	6/30/07
070622060-011	WATER	ICP	6/22/07	6/29/07	7/18/07
		Mercury		6/29/07	6/30/07
070622060-012	WATER	ICP	6/22/07	6/29/07	7/18/07
		Mercury		6/29/07	6/30/07
		· · · ·			
070622060-013	WATER	ICP	6/22/07	6/29/07	7/18/07
		Mercury		6/29/07	6/30/07
070622060-014	WATER	ICP	6/22/07	6/29/07	7/18/07
		Mercury		6/29/07	6/30/07

#### SAMPLE PREPARATION AND ANALYSIS SUMMARY INORGANIC ANALYSES

#### INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO. SD-7-SU-07-6

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Lab Name:	Adirondack	Environmenta	al Co	ntract:	Black Ash Por	nd	·····
Lab Code:	AES	Case No.:	ESE 0702	SAS No.:		SDG No.:	SD-7-SU-07-6
Matrix (soi)	l/water):	SOIL		Lab	Sample ID:	070622060-	-001A
Level (low/n	ned): <u>LO</u>	w		Dat	e Received:	6/22/2007	

% Solids: 78

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Concentration Units (ug/L or mg/kg dry weight):

			T	[	
CAS No.	Analyte	Concentration	C	Q	м
7429-90-5	Aluminum	2230		E	P
7440-36-0	Antimony	4.2	שן		P
7440-38-2	Arsenic	0.62	ס	N	P
7440-39-3	Barium	8.5	B		P
7440-41-7	Beryllium	0.08	סן		P
7440-42-8	Boron	1.9	שן		P
7440-43-9	Cadmium	0.13	Įσ		P
7440-70-2	Calcium	1470		E	P
7440-47-3	Chromium	0.70	ם		P
7440-48-4	Cobalt	1.9	В		P
7440-50-8	Copper	0.64	B		P
7439-89-6	Iron	4520		E	Р
7439-97-6	Mercury	0.04	שן		CV
7439-92-1	Lead	1.0	]		P
7439-95-4	Magnesium	965	B	E	P
7439-96-5	Manganese	43.0		E	P
7440-02-0	Nickel	2.1	В		P
7440-09-7	Potassium	86.2	В		P
7782-49-2	Selenium	0.62	ש		Р
7440-22-4	Silver	0.46	ם		P
7440-23-5	Sodium	133	В		P
7440-28-0	Thallium	0.45	В	N	P
7440-62-2	Vanadium	5.7	В		P
7440-66-6	Zinc	13.1	1	]E	P

Color Before:	 Clarity Before	:	Texture:	 
Color After:	 Clarity After:		Artifacts:	 
Comments:				 

#### INORGANIC ANALYSES DATA SHEET

	EPA SAMPLE NO.
	SD-7-SU-07-18
Lab Name: Adirondack Environmental Contract: Black Ash Pond	
Lab Code: AES Case No.: ESE 0702 SAS No.: SDG	No.: <u>SD-7-SU-07-6</u>
Matrix (soil/water): SOIL Lab Sample ID: 070	622060-002A
Level (low/med): LOW Date Received: 6/2	2/2007

% Solids: 78

Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	с	Q	м
7429-90-5	Aluminum	3380	1	E	P
7440-36-0	Antimony	4.1	ש	[	P
7440-38-2	Arsenic	0.61	ם	N	P
7440-39-3	Barium	12.4	В		P
7440-41-7	Beryllium	0.08	ש		P
7440-42-8	Boron	1.9	םן		P
7440-43-9	Cadmium	0.13	ם		P
7440-70-2	Calcium	2260	I	E	P
7440-47-3	Chromium	2.5	в	1	P
7440-48-4	Cobalt	2.6	В		P
7440-50-8	Copper	1.3	В		P
7439-89-6	Iron	6600		E	P
7439-97-6	Mercury	0.04	ש		CV
7439-92-1	Lead	2.3	l		Р
7439-95-4	Magnesium	1720		E	P
7439-96-5	Manganese	78.0	Í	E	P
7440-02-0	Nickel	3.6	В		P
7440-09-7	Potassium	140	в		P
7782-49-2	Selenium	0.61	ש		P
7440-22-4	Silver	0.46	ן ס		Р
7440-23-5	Sodium	188	В		P
7440-28-0	Thallium	0.41	ש	N	P
7440-62-2	Vanadium	3.2	В		Р
7440-66-6	Zinc	18.6	]	E	P

Color Before:	Clarity Before:	Texture:
Color After:	Clarity After:	Artifacts:
Comments:		

#### INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO. SD-8-SU-07-6 Lab Name: Adirondack Environmental Contract: Black Ash Pond \_\_\_\_ AES Case No.: ESE 0702 SAS No.: Lab Code: SDG No.: SD-7-SU-07-6Matrix (soil/water): SOIL 070622060-003A Lab Sample ID: Level (low/med): LOW Date Received: 6/22/2007

% Solids: 78

Concentration Units (ug/L or mg/kg dry weight):

MG/KG

CAS No.	Analyte	Concentration	c	Q	м
7429-90-5	Aluminum	2130		E	P
7440-36-0	Antimony	4.1	ןם		P
7440-38-2	Arsenic	0.61	ח	N	P
7440-39-3	Barium	7.9	В	1	P
7440-41-7	Beryllium	0.08	] ש		P
7440-42-8	Boron	1.9	ש	1	P
7440-43-9	Cadmium	0.13	ס	1	P
7440-70-2	Calcium	1780	[	E	P
7440-47-3	Chromium	0.69	ש	1	P
7440-48-4	Cobalt	2.0	В	1	P
7440-50-8	Copper	1.3	B	1	P
7439-89-6	Iron	4820		E	P
7439-97-6	Mercury	0.04	ש	1	CV
7439-92-1	Lead	1.5	]	Ī	P
7439-95-4	Magnesium	899	В	E	P
7439-96-5	Manganese	41.5		E	P
7440-02-0	Nickel	2.4	B		P
7440-09-7	Potassium	100	B		P
7782-49-2	Selenium	0.61	ד		P
7440-22-4	Silver	0.46	שן		P
7440-23-5	Sodium	129	B	1	P
7440-28-0	Thallium	0.41	סן	N	P
7440-62-2	Vanadium	5.1	В	1	P
7440-66-6	Zinc	12.9		[ E	P

Color Before:	 Clarity Before:		Texture:	 _
Color After:	 Clarity After:	<u> </u>	Artifacts:	 
Comments:				
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#### INORGANIC ANALYSES DATA SHEET

	EtoRoattic A	INALIGES DATA SILLET	EPA SAMPLE NO.
			SD-8-SU-07-18
Lab Name: Adirondad	ck Environmental C	ontract: Black Ash Po	bud
Lab Code: <u>AES</u>	Case No.: ESE 0702	SAS No.:	SDG No.: SD-7-SU-07-6
Matrix (soil/water):	SOIL	Lab Sample ID:	070622060-004A
Level (low/med):	LOW	Date Received:	6/22/2007

% Solids: 77

Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	3920	1-	E	P
7440-36-0	Antimony	4.2	ש	1	P
7440-38-2	Arsenic	0.63	ש	N	P
7440-39-3	Barium	22.0	B	1	P
7440-41-7	Beryllium	0.08	ש	1	P
7440-42-8	Boron	] 1.9	ם	1	P
7440-43-9	Cadmium	0.13	ם	1	P
7440-70-2	Calcium	2100		E	P
7440-47-3	Chromium	1.0	В	1	P
7440-48-4	Cobalt	3.3	В		P
7440-50-8	Copper	0.82	B		P
7439-89-6	Iron	8990		E	P
7439-97-6	Mercury	0.04	ש		CV
7439-92-1	Lead	] 1.3			P
7439-95-4	Magnesium	1900		E	P
7439-96-5	Manganese	88.2		E	P
7440-02-0	Nickel	3.1	B	1	P
7440-09-7	Potassium	143	B	]	P
7782-49-2	Selenium	0.63	ש		P
7440-22-4	Silver	0.47	ש	1	P
7440-23-5	Sodium	172	B	1	P
7440-28-0	Thallium	0.42	ם	N	P
7440-62-2	Vanadium	5.7	В		P
7440-66-6	Zinc	20.6		E	P

Color Before:	 Clarity Before:	 Texture:	
Color After:	 Clarity After:	 Artifacts:	
Comments:	 	 	
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#### INORGANIC ANALYSES DATA SHEET

SD-9-SU-07-6	
Lab Name: Adirondack Environmental Contract: Black Ash Pond	
Lab Code: AES Case No.: ESE 0702 SAS No.: SDG No.: <u>SD-7-SU-07-6</u>	
Matrix (soil/water): SOIL Lab Sample ID: 070622060-005A	
Level (low/med): LOW Date Received: 6/22/2007	

% Solids: 97

Concentration Units (ug/L or mg/kg dry weight):

			_		
CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	3330	1	E	P
7440-36-0	Antimony	3.3	ש		P
7440-38-2	Arsenic	0.50	סן	N	P
7440-39-3	Barium	8.8	B		P
7440-41-7	Beryllium	0.06	ם		P
7440-42-8	Boron	1.5	ש		P
7440-43-9	Cadmium	0.10	ש	1	P
7440-70-2	Calcium	2320		E	P
7440-47-3	Chromium	1.0	В	Ī	P
7440-48-4	Cobalt	1.9	В		P
7440-50-8	Copper	0.52	B		P
7439-89-6	Iron	5050		E	P
7439-97-6	Mercury	0.03	ש		CV
7439-92-1	Lead	1.2			P
7439-95-4	Magnesium	1020	В	E	Р
7439-96-5	Manganese	47.1		E	P
7440-02-0	Nickel	1.9	В		P
7440-09-7	Potassium	150	В		P
7782-49-2	Selenium	0.50	ש		P
7440-22-4	Silver	0.37	ש		P
7440-23-5	Sodium	283	В	1	P
7440-28-0	Thallium	0.33	ש	N	P
7440-62-2	Vanadium	2.3	В		Р
7440-66-6	Zinc	13.0		E	P

Color Before:	 Clarity Before:	 Texture:	 
Color After:	 Clarity After:	 Artifacts:	 
Comments:	 		
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#### INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO. SD-9-SU-07-18

Lab Name:	Adirondack	Environmenta	1 Cor	stract:	Black Ash	Pond		
Lab Code:	AES	Case No.:	ESE 0702	SAS No.:		SDG	No.:	SD-7-SU-07-6
Matrix (soi	l/water):	SOIL		Lab	Sample ID:	0706	522060-	006A
Level (low/	med): <u>LO</u>	W		Date	Received:	6/22	2/2007	·

% Solids: 77

Concentration Units (ug/L or mg/kg dry weight):

MG/KG

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CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	3900	İ	E	P
7440-36-0	Antimony	4.2	ש		P
7440-38-2	Arsenic	0.63	ס	N	P
7440-39-3	Barium	13.1	В		P
7440-41-7	Beryllium	0.08	ש	1	P
7440-42-8	Boron	1.9	שן		P
7440-43-9	Cadmium	0.13	סן		P
7440-70-2	Calcium	2130		E	P
7440-47-3	Chromium	1.0	B	Ī	P
7440-48-4	Cobalt	2.6	В	1	P
7440-50-8	Copper	0.52	В		P
7439-89-6	Iron	7950	1	E	P
7439-97-6	Mercury	0.04	סן		cv
7439-92-1	Lead	0.42	ש		P
7439-95-4	Magnesium	983	в	E	P
7439-96-5	Manganese	90.8		E	P
7440-02-0	Nickel	2.2	В		P
7440-09-7	Potassium	131	В		P
7782-49-2	Selenium	0.63	ס		P
7440-22-4	Silver	0.47	ש		P
7440-23-5	Sodium	400	в		P
7440-28-0	Thallium	0.42	ש	N	P
7440-62-2	Vanadium	4.3	В		Р
7440-66-6	Zinc	14.6		E	P

Color Before:	 Clarity	Before:	 Texture:	 
Color After:	 Clarity	After:	 Artifacts:	 
Comments:	 		 . <u></u> .	 
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#### INORGANIC ANALYSES DATA SHEET

		1.01				E	PA SAMPLE NO.
						S	D-10-SU-07-6
Lab Name:	Adirondack En	nvironmental	Сол	tract:	Black Ash Por	nd	· · · · · · · · · · · · · · · · · · ·
Lab Code:	AES	Case No.: H	SE 0702	SAS No.:		SDG No.:	SD-7-SU-07-6
Matrix (soil	/water): So	OIL		Lab	Sample ID:	070622060-	007A
Level (low/m	ed): <u>LOW</u>			Date	e Received:	6/22/2007	

% Solids: 77

Concentration Units (ug/L or mg/kg dry weight):

MG/KG

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CAS No.	Analyte	Concentration	C	Q	м
7429-90-5	Aluminum	4950	<u> </u>	E	P
7440-36-0	Antimony	4.2	ש	1	Р
7440-38-2	Arsenic	0.63	ש	N	P
7440-39-3	Barium	8.5	В	1	Р
7440-41-7	Beryllium	0.08	ש		P
7440-42-8	Boron	1.9	ש		P
7440-43-9	Cadmium	0.13	ש		P
7440-70-2	Calcium	3390		E	P
7440-47-3	Chromium	1.8	B	1	P
7440-48-4	Cobalt	2.2	В		P
7440-50-8	Copper	1.0	В	1	Р
7439-89-6	Iron	5050	1	E	P
7439-97-6	Mercury	0.04	ם		CV
7439-92-1	Lead	0.42	ד		P
7439-95-4	Magnesium	1030	В	E	P
7439-96-5	Manganese	36.6	I	E	P
7440-02-0	Nickel	3.1	В		P
7440-09-7	Potassium	136	В	1	P
7782-49-2	Selenium	0.63	ש	[	P
7440-22-4	Silver	0.47	ש		P
7440-23-5	Sodium	526	В		P
7440-28-0	Thallium	0.42	ש	N	P
7440-62-2	Vanadium	1.1	ס		P
7440-66-6	Zinc	11.0	]	E	P

Color Before:	 Clarity	Before:	 Texture:	 
Color After:	 Clarity	After:	 Artifacts:	 
Comments:				 
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## INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO. SD-10-SU-07-18

Lab Nam	e: Adirondack	Environmenta	1 <u> </u>	stract:	Black Ash Pon	.a	
Lab Cod	le: <u>AES</u>	Case No.:	ESE 0702	SAS No.:		SDG No.:	SD-7-SU-07-6
Matrix	(soil/water):	SOIL		Lab	Sample ID:	070622060	-008A
Level (	low/med): LO	W		Dat	e Received:	6/22/2007	

% Solids: 77

Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	С	Q	M
7429-90-5	Aluminum	3620	1	E	P
7440-36-0	Antimony	4.2	ש		P
7440-38-2	Arsenic	0.62	שן	N	P
7440-39-3	Barium	10.1	B	1	P
7440-41-7	Beryllium	0.08	ש		P
7440-42-8	Boron	1.9	ש		P
7440-43-9	Cadmium	0.13	ש		P
7440-70-2	Calcium	3220		E	P
7440-47-3	Chromium	2.0	B		P
7440-48-4	Cobalt	2.5	B		P
7440-50-8	Copper	0.77	B		Р
7439-89-6	Iron	5580		E	P
7439-89-6	Iron   Mercury	5580	<u> </u>  ד	E	P CV
7439-89-6 7439-97-6 7439-92-1	Iron Mercury Lead	5580 0.04 0.66	   ប   B	E   	P CV P
7439-89-6 7439-97-6 7439-92-1 7439-95-4	Iron Mercury Lead Magnesium	5580 0.04 0.66 1350	   T   B 	E 	P CV P P
7439-89-6 7439-97-6 7439-92-1 7439-95-4 7439-96-5	Iron Mercury Lead Magnesium Manganese	5580 0.04 0.66 1350 45.7	   T   B 	E 	P   CV   P   P   P
7439-89-6 7439-97-6 7439-92-1 7439-95-4 7439-96-5 7440-02-0	Iron Mercury Lead Magnesium Manganese Nickel	5580 0.04 0.66 1350 45.7 2.9	  0  B      B	E 	P   CV   P   P   P   P
7439-89-6 7439-97-6 7439-92-1 7439-95-4 7439-96-5 7440-02-0 7440-09-7	Iron Mercury Lead Magnesium Manganese Nickel Potassium	5580 0.04 0.66 1350 45.7 2.9 171	   T   B     B   B	E 	P       CV       P       P       P       P       P       P       P       P       P
7439-89-6 7439-97-6 7439-92-1 7439-95-4 7439-96-5 7440-02-0 7440-09-7 7782-49-2	Iron Mercury Lead Magnesium Manganese Nickel Potassium Selenium	5580 0.04 0.66 1350 45.7 2.9 171 0.62	  D   	E     E   E     	P       CV       P       P       P       P       P       P       P       P       P
7439-89-6 7439-97-6 7439-92-1 7439-95-4 7439-96-5 7440-02-0 7440-09-7 7782-49-2 7440-22-4	Iron Mercury Lead Magnesium Manganese Nickel Potassium Selenium Silver	5580 0.04 0.66 1350 45.7 2.9 171 0.62 0.47	   D   B   B   B   D   D	E     E   E   [   	P       CV       P
7439-89-6 7439-97-6 7439-92-1 7439-95-4 7439-96-5 7440-02-0 7440-09-7 7782-49-2 7440-22-4 7440-23-5	Iron Mercury Lead Magnesium Manganese Nickel Potassium Selenium Silver Sodium	5580 0.04 0.66 1350 45.7 2.9 171 0.62 0.47 314	   D   B   B   B   D   D   B	E     E   E       	P       CV       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P       P
7439-89-6 7439-97-6 7439-92-1 7439-95-4 7439-96-5 7440-02-0 7440-09-7 7782-49-2 7440-22-4 7440-23-5 7440-28-0	Iron Mercury Lead Magnesium Manganese Nickel Potassium Selenium Silver Sodium Thallium	5580 0.04 0.66 1350 45.7 2.9 171 0.62 0.47 314 0.41	 	E 	P       CV       P
7439-89-6 7439-97-6 7439-92-1 7439-95-4 7439-96-5 7440-02-0 7440-09-7 7782-49-2 7440-22-4 7440-23-5 7440-28-0 7440-62-2	Iron         Mercury         Lead         Magnesium         Manganese         Nickel         Potassium         Selenium         Silver         Sodium         Thallium         Vanadium	5580         0.04         0.66         1350         45.7         2.9         171         0.62         0.47         314         0.41         2.7	 	E 	P       CV       P

Color Before:		Clarity Before:	 Texture:	
Color After:		Clarity After:	 Artifacts:	
Comments:				<u> </u>
	<u> </u>		 	

## INORGANIC ANALYSES DATA SHEET

			ORGANC A	ALISES DZ	ATA SHEET		E	PA SAMPLE NO.	
							SI	D-11-SU-07~6	
Lab Name:	Adirondack	Environmenta	al Co	ntract:	Black Ash	Pond			
Lab Code:	AES	Case No.:	<u>ese 0702</u>	SAS No.:	<u></u>	SDG	No.:	<u>SD-7-SU-07-6</u>	
Matrix (soi	l/water):	SOIL		Lab	Sample ID:	0706	<u>522060-</u>	009A	
Level (low/	med): LO	N		Dat	e Received:	6/22	2/2007	<b></b>	

% Solids: 75

Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	с	Q	м
7429-90-5	Aluminum	3890		E	P
7440-36-0	Antimony	4.9	В	]	P
7440-38-2	Arsenic	0.68	В	N	P
7440-39-3	Barium	9.9	В		P
7440-41-7	Beryllium	0.08	שן		P
7440-42-8	Boron	2.0	ש		P
7440-43-9	Cadmium	0.13	ש		P
7440-70-2	Calcium	2320		E	P
7440-47-3	Chromium	1.3	B		P
7440-48-4	Cobalt	2.9	B		P
7440-50-8	Copper	0.53	ם		P
7439-89-6	Iron	7090		E	P
7439-97-6	Mercury	0.04	ש		CV
7439-92-1	Lead	0.79	В		P
7439-95-4	Magnesium	1480	1	E	P
7439-96-5	Manganese	59.6	ł	B	P
7440-02-0	Nickel	3.1	В	1	P
7440-09-7	Potassium	]161	В		P
7782-49-2	Selenium	0.64	ש		P
7440-22-4	Silver	0.48	ם]		P
7440-23-5	Sodium	311	B		P
7440-28-0	Thallium	0.43	ש	N	P
7440-62-2	Vanadium	3.1	В	ļ	P
7440-66-6	Zinc	17.3		E	P

Color Before:	Clarity Before:	 Texture:
Color After:	Clarity After:	 Artifacts:
Comments:		 

#### INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO. SD-11-SU-07-18

Lab Na	me:	Adirondack	Environmenta	1	Сол	tract:	Black Ash Pon	.d	
Lab Co	ode:	AES	Case No.:	ESE	0702	SAS No.:		SDG No.:	SD-7-SU-07-6
Matrix	(soil	/water):	SOIL			Lab	Sample ID:	070622060-	010A
Level	(low/m	ed): <u>LO</u>	W			Date	e Received:	6/22/2007	

% Solids: 77

Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4480	İ	B	P
7440-36-0	Antimony	4.2	ס		P
7440-38-2	Arsenic	0.63	ם	N N	P
7440-39-3	Barium	21.3	B		P
7440-41-7	Beryllium	0.08	ם	1	P
7440-42-8	Boron	1.9	ס		P
7440-43-9	Cadmium	0.13	ים	1	P
7440-70-2	Calcium	2940		E	P
7440-47-3	Chromium	1.3	B	]	P
7440-48-4	Cobalt	2.5	B		P
7440-50-8	Copper	0.98	B	1	P
7439-89-6	Iron	5230	1	E	P
7439-97-6	Mercury	0.04	סן		CV
7439-92-1	Lead	0.44	В		P
7439-95-4	Magnesium	1190	B	E	P
7439-96-5	Manganese	37.3		E	P
7440-02-0	Nickel	2.7	В		P
7440-09-7	Potassium	181	B		P
7782-49-2	Selenium	0.63	שן		P
7440-22-4	Silver	0.47	ש		P
7440-23-5	Sodium	483	B		P
7440-28-0	Thallium	0.42	שן	N	P
7440-62-2	Vanadium	1.1	В		P
7440-66-6	Zinc	17.6		E	P

Color Before:	 Clarity Before:	 Texture:	 
Color After:	 Clarity After:	 Artifacts:	 
Comments:			 
-			
-			

#### INORGANIC ANALYSES DATA SHEET

 EPA SAMPLE NO.

 WM-1-SU-07-10

 Lab Name:
 Adirondack Environmental
 Contract:
 Black Ash Pond

 Lab Code:
 AES
 Case No.:
 ESE 0702
 SAS No.:
 SDG No.:
 SD-7-SU-07-6

 Matrix (soil/water):
 SOIL
 Lab Sample ID:
 070622060-011A

 Level (low/med):
 LOW
 Date Received:
 6/22/2007

 % Solids:
 77

Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	с	Q	м
7429-90-5	Aluminum	2950	1	E	P
7440-36-0	Antimony	4.2	שן		P
7440-38-2	Arsenic	15.0	1	N	P
7440-39-3	Barium	76.1	1		P
7440-41-7	Beryllium	0.67	B		P
7440-42-8	Boron	1.9	ס		P
7440-43-9	Cadmium	0.18	В	1	P
7440-70-2	Calcium	1590	[	E	P
7440-47-3	Chromium	7.8			P
7440-48-4	Cobalt	4.0	B	1	P
7440-50-8	Copper	21.5	1		P
7439-89-6	Iron	4870	1	E	P
7439-97-6	Mercury	0.33	1	[	CV
7439-92-1	Lead	12.1			P
7439-95-4	Magnesium	188	B	E	P
7439-96-5	Manganese	37.6	1	E	P
7440-02-0	Nickel	11.6			P
7440-09-7	Potassium	172	B		P
7782-49-2	Selenium	1.5			P
7440-22-4	Silver	0.47	ש		P
7440-23-5	Sodium	50.3	В		P
7440-28-0	Thallium	0.42	שן	N	P
7440-62-2	Vanadium	22.1			P
7440-66-6	Zinc	12.9	1	E	P

Color Before:		Clarity Before:	 Texture:	 
Color After:		Clarity After:	 Artifacts:	 
	-			
Comments:			 	 

# USEPA - CLP

#### INORGANIC ANALYSES DATA SHEET

						Γ	WM-2-SU-07-6
Lab Name:	Adirondack	Environmenta	<u>1</u> Co	ntract:	Black Ash Po	ond	
Lab Code:	AES	Case No.:	ESE 0702	SAS No.:		SDG N	o.: <u>SD-7-SU-07-6</u>
Matrix (soil	/water):	SOIL		Lab	Sample ID:	07062	22060-012A
Level (low/m	ned): LO	W		Dat	e Received:	6/22/	/2007

% Solids: 80

Concentration Units (ug/L or mg/kg dry weight):

MG/KG

EPA SAMPLE NO.

CAS No.	Analyte	Concentration	с	Q	M
7429-90-5	Aluminum	1890	1	E	P
7440-36-0	Antimony	4.1	סן	<b> </b>	P
7440-38-2	Arsenic	8.1	I	N	P
7440-39-3	Barium	40.3	B		P
7440-41-7	Beryllium	0.30	В		P
7440-42-8	Boron	1.9	סן	]	P
7440-43-9	Cadmium	0.15	В		P
7440-70-2	Calcium	1090	В	E	P
7440-47-3	Chromium	6.2			P
7440-48-4	Cobalt	4.8	В		P
7440-50-8	Copper	21.7			P
7439-99-6	Trop	2640	1	1 70	
1233-03-0	11100	3040	1	l R	1 2
7439-97-6	Mercury	0.24		  E	CV
7439-97-6	Mercury Lead	0.24			P   CV   P
7439-97-6 7439-92-1 7439-95-4	Mercury Lead Magnesium	0.24           16.9           143	    B	E	P   CV   P   P
7439-97-6 7439-92-1 7439-95-4 7439-96-5	Mercury Lead Magnesium Manganese	3640           0.24           16.9           143           39.3	    B 	E    E  E	P CV P P P
7439-97-6       7439-92-1       7439-95-4       7439-96-5       7440-02-0	Mercury Lead Magnesium Manganese Nickel	3640           0.24           16.9           143           39.3           12.9	  B 	E    E  E	P CV P P P P
7439-97-6         7439-92-1         7439-95-4         7439-96-5         7440-02-0         7440-09-7	Mercury Lead Magnesium Manganese Nickel Potassium	3640           0.24           16.9           143           39.3           12.9           148	  B      B	E    E  E	P CV P P P P P
7439-97-6         7439-92-1         7439-95-4         7439-96-5         7440-02-0         7440-09-7         7782-49-2	Mercury Lead Magnesium Manganese Nickel Potassium Selenium	0.24           16.9           143           39.3           12.9           148           1.6	  B    B	E     E   E     	P           CV           P           P           P           P           P           P           P           P           P
7439-97-6         7439-92-1         7439-95-4         7439-96-5         7440-02-0         7440-09-7         7782-49-2         7440-22-4	Mercury Lead Magnesium Manganese Nickel Potassium Selenium Silver	3640       0.24       16.9       143       39.3       12.9       148       0.45	  B  B  B  U		P   P   P   P   P   P   P   P   P
7439-97-6         7439-92-1         7439-95-4         7439-96-5         7440-02-0         7440-09-7         7782-49-2         7440-22-4         7440-23-5	Mercury Lead Magnesium Manganese Nickel Potassium Selenium Silver Sodium	3640       0.24       16.9       143       39.3       12.9       148       0.45	  B    B  U  B		P   P   P   P   P   P   P   P   P
7439-97-6         7439-92-1         7439-95-4         7439-96-5         7440-02-0         7440-09-7         7782-49-2         7440-22-4         7440-23-5         7440-28-0	Mercury Lead Magnesium Manganese Nickel Potassium Selenium Silver Sodium Thallium	0.24       16.9       143       39.3       12.9       148       0.45       0.45       0.40	  B  B  B  D  B	E    E               	P   P   P   P   P   P   P   P   P   P
7439-97-6         7439-92-1         7439-95-4         7439-96-5         7440-02-0         7440-09-7         7782-49-2         7440-23-5         7440-28-0         7440-62-2	Mercury Lead Magnesium Manganese Nickel Potassium Selenium Silver Sodium Thallium Vanadium	3640       0.24       16.9       143       39.3       12.9       148       0.45       42.7       0.40       18.2	  B  B  U  B  U  D	E    E  E   	P           CV           P

Color Before:	 Clarity Before:	 Texture:	
Color After:	 Clarity After:	 Artifacts:	
Comments:		 	
-	 	 	

#### INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO. WM-3-SU-07-9

Lab Nam	ne: <u>Adiror</u>	dack	Environmenta	1	Cor	itrac	t:	Black Ash P	ond		<u></u>
Lab Coo	de: <u>AES</u>		Case No.:	ESE	0702	SAS	No.:		SDG	No.:	SD-7-SU-07-6
Matrix	(soil/water	) <u>-</u>	SOIL				Lab	Sample ID:	070	622060	-013A
Level (	(low/med):	LOP	4				Dat	e Received:	6/2:	2/2007	

% Solids: 71

Concentration Units (ug/L or mg/kg dry weight):

MG/KG

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CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	20200	1	E	P
7440-36-0	Antimony	4.6	ש		P
7440-38-2	Arsenic	23.6		N	P
7440-39-3	Barium	448			P
7440-41-7	Beryllium	2.4			P
7440-42-8	Boron	2.1	ס		P
7440-43-9	Cadmium	0.29	В		P
7440-70-2	Calcium	10400	1	E	P
7440-47-3	Chromium	17.9			P
7440-48-4	Cobalt	15.9			P
7440-50-8	Copper	40.8			P
7439-89-6	Iron	14400		E	Р
7439-97-6	Mercury	0.99			CV
7439-92-1	Lead	13.8			Р
7439-95-4	Magnesium	1480		E	P
7439-96-5	Manganese	524		E	Р
7440-02-0	Nickel	33.9			P
7440-09-7	Potassium	3080			P
7782-49-2	Selenium	0.68	ש		Р
7440-22-4	Silver	0.51	ש		P
7440-23-5	Sodium	236	В		P
7440-28-0	Thallium	0.45	ש	N	P
7440-62-2	Vanadium	32.4			P
7440-66-6	Zinc	70.1		B	P

Color Before:	Clarity Bef	ore:	Texture:	
Color After:	Clarity Aft	er:	Artifacts:	
Comments:				

#### INORGANIC ANALYSES DATA SHEET

WM-4-SU-07-8	
Lab Name: Adirondack Environmental Contract: Black Ash Pond	
Lab Code: AES Case No.: ESE 0702 SAS No.: SDG No.: SD-7-SU-07-6	
Matrix (soil/water): SOIL Lab Sample ID: 070622060-014A	
Level (low/med): LOW Date Received: 6/22/2007	

% Solids: 80

Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	с	Q	м
7429-90-5	Aluminum	3500	İ	E	Р
7440-36-0	Antimony	4.1	ש		P
7440-38-2	Arsenic	8.4		N	P
7440-39-3	Barium	50.7			Р
7440-41-7	Beryllium	0.58	В	]	P
7440-42-8	Boron	1.9	שן	1	Р
7440-43-9	Cadmium	0.18	В	1	P
7440-70-2	Calcium	2330	1	E	P
7440-47-3	Chromium	5.9			P
7440-48-4	Cobalt	3.4	B		P
7440-50-8	Copper	16.8			Р
7439-89-6	Iron	4360		E	Р
7439-97-6	Mercury	0.31			CV
7439-92-1	Lead	18.2			P
7439-95-4	Magnesium	395	в	E	P
7439-96-5	Manganese	87.9		E	P
7440-02-0	Nickel	8.4	в		P
7440-09-7	Potassium	222	в		Р
7782-49-2	Selenium	2.0			Р
7440-22-4	Silver	0.45	ס		₽
7440-23-5	Sodium	87.5	В		Р
7440-28-0	Thallium	0.40	ם	N	Р
7440-62-2	Vanadium	11.8	в		Р
7440-66-6	Zinc	16.0		E	P

Color Before:		Clarity	Before:	 Texture:	 
Color After:		Clarity	After:	 Artifacts:	 
Comments:					 
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-					

## **USEPA - CLP**

## 6

#### **DUPLICATES**

SAMPLE NO.

Lab Name: Adirond	lack Environme	ental Contract:	Blad	ck Ash Pond				
Lab Code: <u>AES</u>	SDG No.	: <u>s</u> r	- <u>7-SU-0</u>	7-6				
Matrix (soil/water):	SOTL	Level (1	.ow/m	ed): <u>LOW</u>				
		ቼ Solids for	Dup	licate: 79.9				
Solids for Sample:				·				
	Concentratio	on Units (ug/L or mg/kg	dry	weight): MG/	KG		_	
Analyte	Control							
Anaryce	Limit	Sample (S)	С	Duplicate (D)	C	RPD	Q	M
Aluminum		3501.9880		3564.0130		1.8	ļ	P
Antimony		4.0551	σ	4.0551	. U			P
Arsenic	2.5	8.3660		7.7199		8.0	Ļ	P
Barium	50.1	50.6962		51.2038	1	1.0		P
Beryllium		0.5753	В	0.5724	В	0.5		P
Cadmium		0.1841	в	0.2055	В	11.0		P
Calcium	1251.6	2333.8010		2343.4340		0.4		P
Chromium	2.5	5.8590		5.4043		8.1		P
Cobalt		3.3682	в	3.1865	в	5.5		P
Copper	6.3	16.8132		17.1397		1.9		P
Iron		4364.2840		4282.2760		1.9	Γ	P
Mercury	0.1	0.3066		0.4130		29.6		CV
Lead		18.2054		17.2586		5.3	Γ	P
Magnesium		395.4205	в	397.7073	В	0.6		P
Manganese		87.8974		83.1527	1	5.5		P
Nickel		8.3549	в	7.9350	B	5.2		P
Potassium		222.1849	в	224.7243	В	1.1	1	P
Selenium	1.3	2.0348		1.5317	1	28.2	T	P
Silver		0.4506	υ	0.4506	50			P
Sodium		87.5442	в	87.6892	В	0.2		P
Thallium		0.4005	υ	0.6755	в	200.0		P
Vanadium		11.7733	в	11.7736	в	0.0		P
Zinc	5.0	15.9789		15.1019		5.6		P

## **USEPA - CLP**

## 6

## DUPLICATES

SAMPLE NO.	
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SD-1	1-51	T07-	18DP
20-1		J-07-	TODE

Lab Name:	Adirondad	k Environme	ntal	Contract:	Black Ash	Pond			
Lab Code:	AES	Case No.:	ESE O	702 SAS 1	No.:	s	DG No.:	SD-7-SU-0	7-6
Matrix (soil	/water):	SOIL		Level (	low/med):	LOW			
% Solids for	Sample:			¥ Solids ic	r Duplicate	: 76.	. 6		
		Concentratio	n Units	(ug/L or mg/)	g dry weigh	t):	MG/KG		
`	-	Control							

Analyte	Limit	Sample (S)	С	Duplicate (D)	с	RPD	Q	м
Mercury			0.0392 U	0	.0392 U			CV
#### **5A**

#### SPIKE SAMPLE RECOVERY

						SAMP	LE NO.		
						WM-4-S	0-07-8MS		
Lab Name: Adiron	dack Envir	onmental	Con	tract: <u>Black Ash</u>	Po	ond			
Lab Code: <u>AES</u>	Case N	IO.: <u>ESE 0702</u> SA	5 No	o.:	2	SDG No.: SD-	-7-SU-07	-6	,
Matrix (soil/wate	:): <u>SOIL</u>	ľe	vel	(low/med): LOW					
ቼ Solids for Sampl	le: 79.9			<u></u>					
•	Cond	centration Units (ug	/L /	or mg/kg dry weight	):	MG/KG	-		
	Control	Spiked Sample		Sample		Spike		Ē	
Analyte	Limit %R	Result (SSR)	С	Result (SR)	С	Added (SA)	%R	Q	м
Aluminum	[]	5233.2090		3501.9880		500.63	345.8		P
Antimony	75 - 125	95.2709		4.0551	υ	125.16	76.1		P
Arsenic	75 - 125	22.3128		8.3660		10.01	139.3	N	P
Barium	75 - 125	573.9628		50.6962		500.63	104.5		P
Beryllium	75 - 125	13.8887		0.5753	В	12.52	106.3		P
Cadmium	75 - 125	12.4917		0.1841	в	12.52	98.3		P
Calcium	1	1997.1420		2333.8010		0.00	0.0		P
Chromium	75 - 125	57.8313		5.8590		50.06	103.8		P
Cobalt	75 - 125	128.5332		3.3682	в	125.16	100.0		P
Copper	75 - 125	05.7023		16.8132		62.58	110.1		P
Iron	1	5572.2510		4364.2840		250.31	482.6		P
Mercury	75 - 125	1.5394		0.3066		1.25	9B.6		cv
Lead	75 - 125	22.7060		18.2054		5.01	89.8		Ρ
Magnesium	1	358.5711	в	395.4205	8	0.00	0.0	1	P
Manganese	75 - 125	206.0908		87.8974		125.16	94.4		P
Nickel	75 - 125	139.1987		0.3549	в	125.16	104.5		P
Potassium	1	285.7538	в	222.1849	в	0.00	0.0		P
Selenium	75 - 125	5.1258		2.0348		2.50	123.6		P
Silver	75 - 125	10.1764		0.4506	σ	12.52	81.3		P
Sodium		110.6404	в	87.5442	в	0.00	0.0		P
Thallium	75 - 125	9.1551		0.4005	σ	12.52	73.1	N	P
Vanadium	75 - 125	145.9158	Ī	11.7733	в	125.16	107.2		P
Zinc	75 - 125	144.8144		15.9789		125.16	102.9		P

#### Comments:

#### 5A

## SPIKE SAMPLE RECOVERY

0.0392 U

1.31

100.6

cv

									SAN	MPLE NO.		
								\$	SD-11-	-SU-07-18M	IS	
Lab 1	Name: Adiro	ondack Envir	onmental	Cont	ract:	Black As	h Po	ond		_		
Lab	Code: <u>AES</u>	Case N	lo.: <u>ESE 0702</u>	SAS No	.:		5	SDG No.	: <u>SI</u>	D-7-S0-07	-6	
Matr	ix (soil/wat	er): <u>SOIL</u>		Level	(low/mea	i): 101	N.					
€ So	lids for Sam	ple: <u>76.6</u>										
		Cond	centration Units	(ug/L o	r mg/kg	dry weigh	it):	-	MG/K	G		
	Analyte	Control Limit %R	Spiked Sample Result (SSR)	с	Samp Result	le (SR)	с	Spike Added	(SA)	*R	Q	м

1.3185

Comments:

Mercury

75 - 125

**5B** 

#### POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

WM-4-SU-07-8A

 Lab Name:
 Adirondack Environmental
 Contract:
 Black Ash Pond

 Lab Code:
 AES
 Case No.:
 ESE 0702
 SAS No.:
 SDG No.:
 SD-7-SU-07-6

 Matrix (soil/water):
 SOIL
 Level (low/med):
 LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	с	Sample Result (SR)	с	Spike Added (SA)	₿R.	Q	м
Aluminum		4469.34		3501.99		1001.3	96.6		Р
Antimony		250.17		4.06	υ	250.3	99.9		P
Arsenic		28.40		8.37		20.0	100.2		P
Barium		1044.94		50.70		1001.3	99.3		Р
Beryllium		26.88		0.58	в	25.0	105.2		P
Cadmium		25.94		0.18	в	25.0	103.0		P
Calcium		2292.31		2333.80		0.0	0.0		Р
Chromium		110.20		5.86		100.1	104.2		P
Cobalt		266.13		3.37	в	250.3	105.0		P
Copper		150.87		16.81		125.2	107.1		P
Iron		4646.69		4364.28		500.6	56.4	ĺ	P
Lead		28.35		10.21		10.0	101.4		P
Magnesium		305.48	в	395.42	в	0.0	0.0		P
Manganese		344.44		87.90		250.3	102.5		P
Nickel		281.57		8.35	в	250.3	109.2		Р
Potassium		223.94	в	222.18	в	0.0	0.0		Р
Selenium		7.47		2.03		5.0	108.8		P
Silver		22.64		0.45	υ	25.0	90.6		Р
Sodium		87.97	в	87.54	в	0.0	0.0		P
Thallium		22.52		0.40	υ	25.0	90.1		Р
Vanadium		271.39		11.77	в	250.3	103.7		P
Zinc		280.56		15.98		250.3	105.7		P

Comments:

## 3

#### BLANKS

 Lab Name:
 Adirondack Environmental
 Contract:
 Black Ash Pond

 Lab Code:
 AES
 Case No.:
 ESE 0702
 SAS No.:
 SDG No.:
 SD-7-SU-07-6

 Preparation Blank Matrix (soil/water):
 SOIL

 Preparation Blank Concentration Units (ug/L or mg/kg):
 MG/KG

	Initial Calib. Blank (ug/L)			C	ontinuing Cal Blank (ug,	Libı /L)	ration		Preparation Blank		
Analyte	(09/2)	С	1	С	2	c	3	С		с	м
Aluminum	15.1	В	17.9	В	9.2	B	8.3	в	4.670	в	P
Antimony	16.2	υ	16.2	ס	16.2	ש	16.2	σ	3.240	σ	P
Arsenic	2.4	σ	2.4	ש	2.4	ש	2.4	σ	0.480	σ	P
Barium	3.4	ש	3.4	ש	3.4	ש	3.4	σ	0.680	σ	P
Beryllium	0.3	σ	0.3	ש	0.3	٩	0.3	σ	0.060	σ	P
Cadmium	0.5	ਹ	0.5	ש	0.5	ש	0.5	σ	0.100	σ	P
Calcium	6.9	σ	6.9	ש	6.9	ש	6.9	σ	1.380	σ	P
Chromium	2.7	σ	2.7	ש	2.7	ש	2.7	σ	0.540	σ	P
Cobalt	0.9	σ	0.9	סן	0.9	ש	0.9	σ	0.180	σ	P
Copper	2.0	υ	2.0	ס	2.0	ש	2.0	υ	0.400	σ	P
Iron	7.3	٩	12.5	В	7.3	σ	7.3	σ	1.460	σ	P
Mercury	0.06	σ	0.06	ש	0.06	ש	0.06	σ	0.030	σ	CV
Lead	1.6	σ	1.6	ס	1.6	ש	1.6	σ	0.320	σ	P
Magnesium	9.2	ប	9.2	σ	9.2	σ	9.2	σ	1.840	σ	P
Manganese	0.3	σ	0.3	σ	0.3	σ	0.3	υ	0.0601	ਹ	P
Nickel	0.9	σ	0.9	ס	0.9	ש	0.9	σ	0.180	σ	P
Potassium	3.2	ס	3.2	σ	3.2	σ	3.2	υ	0.640	σ	P
Selenium	2.4	ប	2.4	σ	2.4	σ	2.4	σ	0.480	σ	P
Silver	1.8	σ	1.8	ש	1.8	σ	1.8	υ	0.360	σ	P
Sodium	8.6	σ	8.6	ס	8.6	σ	8.6	ד	1.720	σ	P
Thallium	1.6	σ	1.6	σ	1.6	ש	1.6	σ	0.320	σ	P
Vanadium	4.2	ש	4.2	σ	4.2	ש	4.2	σ	0.840	σ	P
Zinc	0.7	σ	0.7	σ	0.7	ס	0.7	σ	0.140	υ	P

## 3

#### BLANKS

 Lab Name:
 Adirondack Environmental
 Contract:
 Black Ash Pond

 Lab Code:
 AES
 Case No.:
 ESE 0702
 SAS No.:
 SDG No.:
 SD-7-SU-07-6

 Preparation Blank Matrix (soil/water):
 SOIL

 Preparation Blank Concentration Units (ug/L or mg/kg):
 MG/KG

.

	Initial Calib. Blank			Co	ntinuing Cal Blank (ug/	ibr 'L)	ation		Preparation Blank		
Analyte	(09/1)	С	1	С	2	С	3	с		с	м
Aluminum			29.8	B	7.8	B	9.7	в	<u> </u>		P
Antimony			16.2	ש	16.2	ש	16.2	σ			P
Arsenic			2.4	ש	2.4	ש	2.4	σ			P
Barium			3.4	ש	3.4	ש	3.4	ש			P
Beryllium			0.3	ש	0.3	ס	0.3	שן			P
Cadmium			0.5	σ	0.5	σ	0.5	υ			P
Calcium			6.9	ש	6.9	ש	6.9	ש			P
Chromium			2.7	σ	2.7	ש	2.7	σ			P
Cobalt			0.9	ש	0.9	ש	0.9	σ			P
Copper			2.0	ש	2.0	υ	2.0	ש			P
Iron			7.3	ע	7.3	υ	7.3	σ			P
Lead			1.6	ס	1.6	υ	1.6	σ			P
Magnesium			9.2	σ	9.2	σ	9.2	υ			P
Manganese			0.3	ש	0.3	σ	0.3	σ			P
Nickel			0.9	σ	0.9	ש	0.9	σ	1		P
Potassium			3.2	ש	3.2	ש	3.2	σ			P
Selenium			2.4	ש	2.4	ס	2.4	σ			P
Silver			1.8	ס	1.8	ש	1.8	σ			P
Sodium			8.9	B	25.7	В	24.2	в			P
Thallium			1.6	ש	1.6	σ	1.6	0			P
Vanadium			4.2	ד	4.2	υ	4.2	σ			P
Zinc			0.7	σ	0.7	ש	0.7	σ			P

## 3

#### BLANKS

 Lab Name:
 Adirondack Environmental
 Contract:
 Black Ash Pond

 Lab Code:
 AES
 Case No.:
 ESE 0702
 SAS No.:
 SDG No.:
 SD-7-SU-07-6

 Preparation Blank Matrix (soil/water):
 SOIL

 Preparation Blank Concentration Units (ug/L or mg/kg):
 MG/KG

.

	Initial Calib. Blank (ug(L)			Co	Datinuing Blank (	Calibr (ug/L)	ation		Preparation Blank		Ţ
Analyte	(dg/H)	С	l	С	2	с	3	с		С	м
Aluminum			13.7	В							P
Antimony			16.2	υ							P
Arsenic			2.4	ס						<u> </u>	P
Barium			3.4	ש						ĺ	P
Beryllium			0.3	ש				<u> </u>			P
Cadmium			0.5	ש						1	P
Calcium			6.9	σ							P
Chromium			2.7	ס							P
Cobalt			0.9	ש							P
Copper			2.0	ד							P
Iron			7.3	σ		11					P
Lead			1.6	ס		11		1			P
Magnesium			9.2	ד							P
Manganese			0.3	ש							P
Nickel			0.9	ע							P.
Potassium			3.2	ס		11					P
Selenium			2.4	ד		i î					P
Silver			1.8	ש		11					P
Sodium			8.6	ש							P
Thallium			1.6	סן		i i					P
Vanadium			4.2	סן			-				P
Zinc			0.7	σ							P

## SAMPLE DATA

PACKAGE



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### **Case Narrative**

## Client: Earth Science Engineering - Black Ash Pond / Willsboro

Case: ESE 0702

SDG: SD-7-SU-07-6

SD-7-SU-07-6070622060-00106/22/0713:00SoiSD-7-SU-07-18070622060-00206/22/0713:00SoiSD-8-SU-07-6070622060-00306/22/0713:00SoiSD-8-SU-07-18070622060-00406/22/0713:00SoiSD-9-SU-07-6070622060-00506/22/0713:00Soi	<u>trix</u>
SD-7-SU-07-18070622060-00206/22/0713:00SoiSD-8-SU-07-6070622060-00306/22/0713:00SoiSD-8-SU-07-18070622060-00406/22/0713:00SoiSD-9-SU-07-6070622060-00506/22/0713:00Soi	1
SD-8-SU-07-6070622060-00306/22/0713:00SoiSD-8-SU-07-18070622060-00406/22/0713:00SoiSD-9-SU-07-6070622060-00506/22/0713:00Soi	1
SD-8-SU-07-18070622060-00406/22/0713:00SoiSD-9-SU-07-6070622060-00506/22/0713:00Soi	1
SD-9-SU-07-6 070622060-005 06/22/07 13:00 Soi	1
	1
SD-9-SU-07-18 070622060-006 06/22/07 13:00 Soi	1
SD-10-SU-07-6 070622060-007 06/22/07 13:00 Soi	1
SD-10-SU-07-18 070622060-008 06/22/07 13:00 Soi	Ī
SD-11-SU-07-6 070622060-009 06/22/07 13:00 Soi	1
SD-11-SU-07-18 070622060-010 06/22/07 13:00 Soi	1
WM-1-SU-07-10 070622060-011 06/22/07 13:00 Soi	1
WM-2-SU-07-6 070622060-012 06/22/07 13:00 Soi	1
WM-3-SU-07-9 070622060-013 06/22/07 13:00 Soi	1
WM-4-SU-07-8 070622060-014 06/22/07 13:00 Soi	l

### **Inorganics** – Metals

- 1) The soil samples received on 6/22/07 had a temperature of 6 °C.
- 2) The recovery for Aluminum, Calcium and Iron in the ICSA and the ICSAB check standards were outside the required limit. The required concentration for these analytes in the check standards is 500,000 ug/L and 200,000 ug/L, respectively. The linear range on this instrument for Aluminum, Calcium and Iron is 250,000 ug/L, 200,000 ug/L and 80,000 ug/L, respectively. At this level accurate recovery of Aluminum, Calcium and Iron in the check standards is not possible. No further action is required.
- 3) The digested spike recoveries for the elements Arsenic and Thallium on sample WM-4-SU-07-8 (AES sample number 070622060-014) were outside the required 75-125 % limits. A post digestion spike was performed and the recoveries were within acceptable limits. The results for these elements are flagged with an "N" as specified by the protocol. This indicates possible matrix interference.



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4) The elements Aluminum, Calcium, Iron, Magnesium, Manganese and Zinc for sample WM-4-SU-07-8 (AES sample number 070622060-014) did not meet the serial dilution criteria of 10 %. These elements are flagged with an "E" as required by the protocol. The "E" denotes an estimated value. This indicates a possible chemical or physical interference.

"I certify that this data package is in compliance with the terms and conditions of the protocol, both technically and for completeness, to the best of my knowledge, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Laboratory Manager

Date: 9/4/07



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Gentricatinenes	Start deservations	010-404-40	101-10-1	JUST FAX	^						
Experience is	the solution	A fu	Il service	analytical	research lat	orator	y of	fering s	solutio	ns to e	nvironmental concerns
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Send Report To	Leville Engini	eering r.C.	Project Nar	ne (Location	otreet,	<u> </u>	• D	OX つ Sam	niers: (	<u>Withs</u> Names)	50010, NY 12946
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ILIS 96	0: 3-\$133	(SIR) 962	-7491	A F	Number:	OT.	_	Sam	plers/{	Signatur	
(310) 20.	0.75	100/07	710		101 00	Tin	ne	Sampl	ka Type	Number	
AES Sample Number	Sa	client imple identification &	Location		Oale Sampled	A=a. P=p.	.៣. .៣.	Matrix	Comp Grah	ol Conl's	Analysis Required
001	SD-7-	Su - 07-	6	_	6/2)	8 100	<b>19</b>	Si)	~	1	TAL METCLS
200	SD-7-	Su 07 -	- 18		11	<u>6;9</u>	90	Suit	Y	1	14
003	SD-8-	Su - 07 -	-6		11	8:30	B P	ţi.	Y		11
004	50-8-	Su - 07-	-18	_	1.1.	8:30	39) P	46	~	1	14
005	SD-9-	Su- 07.	-6			8;4S	P	ļi.	~	1	13
006	SD-9-	Su - 07-	- 18		13	8:45	P	<del>й</del>	v		15
007	SD - 10	- Su - 07	7-6		۲۱	9:00	P	"	V		13
008	SD-10	- Su - 07	7-18		11	9:00	P	р ,	~		15
009 SD - 11- SU - 07-6 " 9:50 P" 1 "											
SD - 1  - Sv - 07 - 18 1 9:30 P 4 V 11											
010 /	MS2- 5	SD - 11 - Su	- 07	-18		9:30	P	н	_ V	ſ	¥(
	MSDZ-	SD-11-SU	1-07	-18	11	9:50	B P	4	Y		11
							A P				
		· ·		_			A P	_			
AES Work Order	1. F.			CC Report	To / Special Ins	tructions	s/Ren	narks:			
0-	10622	.060									
Turnaround Time	Request:										
🛄 1 Day	🖸 3 Day	V Normal									
	C S Uay	/									
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•						1	).	A	1		6/22/07 100
	TEMPERATURE PROPERLY PRESERVED RECEIVED WITHIN HOLDING TIMES										
Aml Notes:	bient or Chi	lled (6°)	Notes	(Y	) N				Notes	(	Y N
	WHITE - Lab	Сору		YELLOW -	Sampler Conv		-		DI	NK - Can	eralor Conv
		Adir	ondacl		onmental	Sen	vice	es In	R	HA - 080	alaral cahà
		1 Call	anadon		annian	Conv	noc	<b>1</b> , 11	ю.		00030



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## 242 CHAIN OF CUSTODY RECORD

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Client Name:			Address: 4						_		
Earth Science	<u>ce Engineering</u>	P.C.	3721 Main	1 Stre	xt, P.O	. Box	34	<u>, w</u>	ills	000,	NY 12996
Doverlas 1	R. Ferris, P	·£.	Black Ash	Pond	Wille	hora)		Sam	blers:	(Names)	1Kanop
(Sig) 963	1: - 8133	Client Fax No:	- 7490	PO Nurr P_/	ber:	2 E		Sam	nlers:	(Signalu	(8)
AES		Client			Date	Tin A=a	ne .m.			Nurole e of	$f \sigma = 0$
	San San	nple identification &	Localion		Sampled	P=p.	.m.	matrix	ð	5 Cont's	Analysis Required
	WI11-1 -	50-0	$\frac{1}{7} - 10$		<u>121</u>	11:50	P	Soil		1	TAL Metals
	WM-2	- <u>Ju</u> -0	7-6		<u>algı</u>		P			1	ja
	WM-3	- <u>Su</u> - C	<u>7 - 9</u>		elai	11:35	P	//	1	1-	υ 
014	1wm-4	- 50 -0	7-8		bjar	)):40	P			1	11
—A	MS3-4	UM-4-	Su-07-0	8	bjar	11:95	P	"	1	1	13
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AES Work Order	<i>ŧ</i> :		CC Rep	ort To /	Special Insl	tructions	s/Rem	iarks:		<u> </u>	
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Turnaround Time	Request:	1									
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**CHAIN-OF-CUSTODY RECORD** 

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Page 1 of

WorkOrder: 070622060

# Cllent:

TEL: (518) 963-8133	FAX: (518) 963-7490	ProjectNo: Willsboro / Blac	PO:
Earth Science Engineering, P.C.	24 South Main Street	Willsboro, NY 12996	

22-Jun-07

Requested Tests

PMOIST	A	V	A	4	A	A	4	A	<	<	<	×	A	A
SOFERCURY_SOI F	A	A	۲	A	A	۲	A	×	A	A	A	A	A	V
Bottle P METALS S	V	A	V	×	•	×	4	4	•	A	•	A	A	×
Collection Date	6/21/2007	6/21/2007	6/21/2007	6/21/2007	6/21/2007	6/21/2007	6/21/2007	6/21/2007	6/21/2007	6/21/2007	6/21/2007	6/21/2007	6/21/2007	6/21/2007
Matrix	Soil	Soil	Sail	Soil	Soil	Soil	Soil	Soil	Soll	Soil	Soil	Soil	Soil	Soil
ClientSampID	WM-4-SU-07-8	WM-3-SU-07-9	WM-2-SU-07-6	WM-1-SU-07-10	SD-11-SU-07-18	SD-11-SU-07-6	SD-10-SU-07-18	SD-10-SU-07-6	SD-9-SU-07-18	SD-9-SU-07-6	SD-8-SU-07-18	SD-8-SU-07-6	SD-7-SU-18	SD-7-SU-07-6
Sample ID	070622060-014	070622060-013	070622060-012	070622060-011	070622060-010	070622060-009	070622060-008	070622060-007	070622060-006	070622060-005	070622060-004	070622060-003	070622060-002	070622060-001

Comments:



Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

## **INORGANIC - METALS**

## ANALYSIS

### COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

lab Name:	Adirondack Environmental	Contract: Black Ash Pond
lab Code:	AES Case No.: ESE 0702	SAS No.: SDG No.: <u>SD-7-SU-07-</u>
SOW No.:	N/A	
	EPA Sample No.	Lab Sample ID.
	SD-7-SU-07-6	070622060-001A
	SD-7-SU-07-18	070622060-002A
	SD-8-SU-07-6	070622060-003A
	SD-8-SU-07-18	070622060-004A
	SD-9-SU-07-6	070622060-005A
	SD-9-SU-07-18	070622060-006A
	SD-10-SU-07-6	070622060-007A
	SD-10-SU-07-18	070622060-008A
	SD-11-SU-07-6	070622060-009A
	SD-11-SU-07-18	070622060-010A
	WM-1-SU-07-10	070622060-011A
	WM-2-SU-07-6	070622060-012A
	WM-3-SU-07-9	070622060-013A
	WM-4-SU-07-8	070622060-014A

Were	ICP interelement corrections applied?	Yes/No	<u>YES</u>
Were	ICP background corrections applied? If yes-were raw data generated before	Yes/No	YES
	application of background corrections?	Yes/No	<u>NO</u>

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:

Style Marken 9/4/07

Name:

Title:

COVER PAGE - IN

Sheryl Martucci

Date:

\_\_\_\_\_

Inorganics Manager

## INORGANIC ANALYSES DATA SHEET

Lab Name: Adirondack Environmental Contract: Black Ash Pond					EPA SAMPLE NO.	
Lab Name: Adirondack Environmental Contract: Black Ash Pond					SD-7-SU-07-6	
	Lab Name: Adironda	ack Environmental	Contract:	Black Ash Po	ond	-
Lab Code: AES Case No.: ESE 0702 SAS No.: SDG No.: SD-7-SU-07-6	Lab Code: AES	Case No.: ESE	0702 SAS No.:		SDG No.: <u>SD-7-SU-07-6</u>	
Matrix (soil/water): SOIL Lab Sample ID: 070622060-001A	Matrix (soil/water):	SOIL	Lab	Sample ID:	070622060-001A	
Level (low/med): LOW Date Received: 6/22/2007	Level (low/med):	LOW	Dat	e Received:	6/22/2007	

% Solids: 78

Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	2230	1	E	P
7440-36-0	Antimony	4.2	סן	]	P
7440-38-2	Arsenic	0.62	ם	N	P
7440-39-3	Barium	8.5	В	Ī	P
7440-41-7	Beryllium	0.08	ס		P
7440-42-8	Boron	1.9	ש	1	P
7440-43-9	Cadmium	0.13	שן		P
7440-70-2	Calcium	1470		E	P
7440-47-3	Chromium	0.70	ס		P
7440-48-4	Cobalt	1.9	В	1	P
7440-50-8	Copper	0.64	В		P
7439-89-6	Iron	4520		E	P
7439-97-6	Mercury	0.04	ש		CV
7439-92-1	Lead	1.0			P
7439-95-4	Magnesium	965	В	E	P
7439-96-5	Manganese	43.0		E	P
7440-02-0	Nickel	2.1	В		P
7440-09-7	Potassium	86.2	В		P
7782-49-2	Selenium	0.62	ס		P
7440-22-4	Silver	0.46	υ		P
7440-23-5	Sodium	133	В	Ī	P
7440-28-0	Thallium	0.45	В	N	P
7440-62-2	Vanadium	5.7	В		P
7440-66-6	Zinc	13.1		E	P

Color Before:		Clarity Before:		Texture:	·	
Color After:		Clarity After:	. <u></u>	Artifacts:		
Comments:			<u> </u>			
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### INORGANIC ANALYSES DATA SHEET

							E	PA SAMPLE NO.	
							S	D-7-SU-07-18	
Lab Name:	Adirondack	Environmenta	l Co	ntract:	Black Ash	Pond			
Lab Code:	AES	Case No.:	ESE 0702	SAS No.:		SDG	No.:	SD-7-SU-07-6	
Matrix (soi)	l/water):	SOIL		Lab	Sample ID:	0706	522060-	002A	
Level (low/r	med): LON	<u> </u>		Dat	e Received:	6/22	2/2007		

% Solids: 78

Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	с	Q	м
7429-90-5	Aluminum	3380	1	E	P
7440-36-0	Antimony	4.1	σ		P
7440-38-2	Arsenic	0.61	υ	N	P
7440-39-3	Barium	12.4	В	1	P
7440-41-7	Beryllium	0.08	σ	1	Р
7440-42-8	Boron	1.9	ס	1	P
7440-43-9	Cadmium	0.13	σ		P
7440-70-2	Calcium	2260		E	P
7440-47-3	Chromium	2.5	в		P
7440-48-4	Cobalt	2.6	в	1	Р
7440-50-8	Copper	1.3	В		Р
7439-89-6	Iron	6600		E	P
7439-97-6	Mercury	0.04	σ		cv
7439-92-1	Lead	2.3			Р
7439-95-4	Magnesium	1720		B	P
7439-96-5	Manganese	78.0		R	P
7440-02-0	Nickel	3.6	В		P
7440-09-7	Potassium	140	B		P
7782-49-2	Selenium	0.61	σ		Р
7440-22-4	Silver	0.46	σ		P
7440-23-5	Sodium	188	В		P
7440-28-0	Thallium	0.41	ס	N	P
7440-62-2	Vanadium	3.2	B		P
7440-66-6	Zinc	18.6		E	Р

Color Before:	 Clarity Before:	<u></u>	Texture:	
Color After:	 Clarity After:		Artifacts:	·
Comments:	 			
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### INORGANIC ANALYSES DATA SHEET

	EPA SAMPLE NO.
	SD-8-SU-07-6
Lab Name: Adirondack Environmental Contract: Black Ash Pond	
Lab Code: AES Case No.: ESE 0702 SAS No.: SDG	No.: <u>SD-7-SU-07-6</u>
Matrix (soil/water): SOIL Lab Sample ID: 0706	522060-003A
Level (low/med): LOW Date Received: 6/22	2/2007

% Solids: 78

Concentration Units (ug/L or mg/kg dry weight):

CAS No.         Analyte         Concentration         C         Q         M           7429-90-5         Aluminum         2130         E         P           7440-36-0         Antimony         4.1         V         P           7440-38-2         Arsenic         0.61         V         N         P           7440-39-3         Barium         7.9         B         P           7440-41-7         Beryllium         0.08         V         P           7440-42-8         Boron         1.9         V         P           7440-42-8         Boron         1.9         V         P           7440-42-8         Boron         1.9         V         P           7440-43-9         Cadmium         0.13         V         P           7440-43-9         Cadmium         0.69         V         P           7440-48-4         Cobalt         2.0         B         P           7439-89-6         Iron         4820         E         P           7439-97-6         Mercury         0.04         V         CV           7439-95-4         Magnesium         899         B         P           7440-02-0         <						
7429-90-5       Aluminum       2130       E       P         7440-36-0       Antimony       4.1       U       P         7440-38-2       Arsenic       0.61       U       N       P         7440-38-2       Arsenic       0.61       U       N       P         7440-39-3       Barium       7.9       B       P         7440-41-7       Beryllium       0.08       U       P         7440-42-8       Boron       1.9       U       P         7440-43-9       Cadmium       0.13       U       P         7440-43-9       Calcium       1780       E       P         7440-47-3       Chromium       0.69       U       P         7440-48-4       Cobalt       2.0       B       P         7439-89-6       Iron       4820       E       P         7439-97-6       Mercury       0.04       U       CV         7439-92-1       Lead       1.5       P       P         7440-02-0       Nickel       2.4       P       P         7440-02-0       Nickel       2.4       P       P         7440-02-7       Potassium       0.61 <td>CAS No.</td> <td>Analyte</td> <td>Concentration</td> <td>с</td> <td>Q</td> <td>м</td>	CAS No.	Analyte	Concentration	с	Q	м
7440-36-0       Antimony       4.1 $\overline{\nabla}$ P         7440-38-2       Arsenic       0.61 $\overline{\nu}$ N       P         7440-39-3       Barium       7.9       B       P         7440-41-7       Beryllium       0.08 $\overline{\nu}$ P         7440-42-8       Boron       1.9 $\overline{\nu}$ P         7440-42-8       Boron       1.9 $\overline{\nu}$ P         7440-43-9       Cadmium       0.13 $\overline{\nu}$ P         7440-43-9       Cadmium       0.13 $\overline{\nu}$ P         7440-43-9       Cadmium       0.69 $\overline{\nu}$ P         7440-48-4       Cobalt       2.0       B       P         7440-50-8       Copper       1.3       B       P         7439-89-6       Iron       4820       E       P         7439-97-6       Mercury       0.04 $\overline{\nu}$ CV         7439-95-4       Magnesium       899       B       E       P         7440-02-0       Nickel       2.4       B       P         7440-02-0       Nickel       2.4       P       P         7440-02-7	7429-90-5	Aluminum	2130	1	E	P
7440-38-2       Arsenic       0.61       V       N       P         7440-39-3       Barium       7.9       B       P         7440-41-7       Beryllium       0.08       V       P         7440-42-8       Boron       1.9       V       P         7440-43-9       Cadmium       0.13       V       P         7440-43-9       Cadmium       0.13       V       P         7440-43-9       Cadmium       0.69       V       P         7440-43-4       Cobalt       2.0       B       P         7440-48-4       Cobalt       2.0       B       P         7440-50-8       Copper       1.3       P       P         7439-89-6       Iron       4820       E       P         7439-97-6       Mercury       0.04       V       CV         7439-92-1       Lead       1.5       P       P         7440-02-0       Nickel       2.4       P       P         7440-02-0       Nickel       2.4       P       P         7440-02-0       Nickel       2.4       P       P         7440-02-7       Potassium       0.61       V	7440-36-0	Antimony	4.1	סן		P
7440-39-3       Barium       7.9       B       P         7440-41-7       Beryllium       0.08       U       P         7440-42-8       Boron       1.9       U       P         7440-42-8       Boron       0.13       U       P         7440-42-8       Boron       0.13       U       P         7440-43-9       Cadmium       0.13       U       P         7440-43-9       Calcium       1780       E       P         7440-47-3       Chromium       0.69       U       P         7440-47-3       Chromium       0.69       U       P         7440-48-4       Cobalt       2.0       B       P         7439-89-6       Iron       4820       E       P         7439-97-6       Mercury       0.04       U       CV         7439-97-6       Mercury       0.04       U       CV         7439-95-4       Magnesium       899       B       P         7440-02-0       Nickel       2.4       B       P         7440-02-0       Nickel       2.4       P       P         7440-23-5       Sodium       0.61       U       P	7440-38-2	Arsenic	0.61	שן	N	P
7440-41-7       Beryllium       0.08       0       P         7440-42-8       Boron       1.9       0       P         7440-43-9       Cadmium       0.13       0       P         7440-43-9       Cadmium       0.13       0       P         7440-43-9       Calcium       1780       E       P         7440-70-2       Calcium       1780       E       P         7440-47-3       Chromium       0.69       0       P         7440-48-4       Cobalt       2.0       B       P         7440-50-8       Copper       1.3       B       P         7439-89-6       Iron       4820       E       P         7439-97-6       Mercury       0.04       0       CV         7439-97-6       Mercury       0.04       P       P         7439-95-4       Magnesium       899       B       P         7440-02-0       Nickel       2.4       P       P         7440-02-0       Nickel       0.61       P       P         7440-02-7       Potassium       0.61       P       P         7440-23-5       Sodium       129       P       P<	7440-39-3	Barium	7.9	B		P
7440-42-8       Boron       1.9       0       P         7440-43-9       Cadmium       0.13       0       P         7440-70-2       Calcium       1780       E       P         7440-70-2       Calcium       1780       E       P         7440-47-3       Chromium       0.69       0       P         7440-48-4       Cobalt       2.0       B       P         7440-50-8       Copper       1.3       P       P         7439-89-6       Iron       4820       E       P         7439-97-6       Mercury       0.04       0       CV         7439-97-6       Mercury       0.04       P       P         7439-95-4       Magnesium       899       B       P         7440-02-0       Nickel       2.4       P       P         7440-02-0       Nickel       2.4       P       P         7440-09-7       Potassium       100       P       P         7440-22-4       Silver       0.46       P       P         7440-23-5       Sodium       129       P       P         7440-28-0       Thallium       0.41       N       P	7440-41-7	Beryllium	0.08	ש		P
7440-43-9       Cadmium       0.13       U       P         7440-70-2       Calcium       1780       E       P         7440-47-3       Chromium       0.69       U       P         7440-48-4       Cobalt       2.0       B       P         7440-50-8       Copper       1.3       B       P         7439-89-6       Iron       4820       E       P         7439-97-6       Mercury       0.04       U       CV         7439-97-6       Mercury       0.04       U       CV         7439-95-4       Magnesium       899       B       P         7440-02-0       Nickel       2.4       B       P         7440-02-0       Nickel       2.4       B       P         7440-02-0       Nickel       2.4       P       P         7440-02-0       Nickel       0.61       U       P         7440-02-0       Nickel       0.46       U       P         7440-23-5       Sodium       129       P       P         7440-28-0       Thallium       0.41       N       P         7440-62-2       Vanadium       5.1       B       P	7440-42-8	Boron	1.9	ש	1	P
7440-70-2       Calcium       1780       E       P         7440-47-3       Chromium       0.69       U       P         7440-48-4       Cobalt       2.0       B       P         7440-50-8       Copper       1.3       B       P         7439-89-6       Iron       4820       E       P         7439-97-6       Mercury       0.04       U       CV         7439-92-1       Lead       1.5       P         7439-95-4       Magnesium       899       B       P         7440-02-0       Nickel       2.4       B       P         7440-02-0       Nickel       2.4       B       P         7440-02-0       Selenium       0.61       U       P         7440-02-0       Silver       0.46       P       P         7440-23-5       Sodium       129       P       P         7440-28-0       Thallium       0.41       V       P         7440-62-2       Vanadium       5.1       P       P	7440-43-9	Cadmium	0.13	L <u>n</u>		P
7440-47-3       Chromium       0.69       V       P         7440-48-4       Cobalt       2.0       B       P         7440-50-8       Copper       1.3       B       P         7439-89-6       Iron       4820       E       P         7439-97-6       Mercury       0.04       V       CV         7439-92-1       Lead       1.5       P         7439-95-4       Magnesium       899       B       P         7439-95-5       Manganese       41.5       E       P         7440-02-0       Nickel       2.4       B       P         7440-02-0       Nickel       0.61       V       P         7440-22-4       Silver       0.46       V       P         7440-22-5       Sodium       129       P       P         7440-23-5       Sodium       129       P       P         7440-62-2       Vanadium       5.1       B       P         7440-62-2       Vanadium       5.1       P       P	7440-70-2	Calcium	1780		E	P
7440-48-4       Cobalt       2.0       B       P         7440-50-8       Copper       1.3       E       P         7439-89-6       Iron       4820       E       P         7439-97-6       Mercury       0.04       U       CV         7439-97-6       Mercury       0.04       U       CV         7439-97-6       Mercury       0.04       U       CV         7439-92-1       Lead       1.5       P         7439-95-4       Magnesium       899       E       P         7439-96-5       Manganese       41.5       E       P         7440-02-0       Nickel       2.4       P       P         7440-09-7       Potassium       100       P       P         7440-22-4       Silver       0.46       U       P         7440-23-5       Sodium       129       P       P         7440-28-0       Thallium       0.41       N       P         7440-62-2       Vanadium       5.1       P       P	7440-47-3	Chromium	0.69	ש		P
7440-50-8       Copper       1.3       B       P         7439-89-6       Iron       4820       E       P         7439-97-6       Mercury       0.04       U       CV         7439-92-1       Lead       1.5       P         7439-95-4       Magnesium       899       B       E       P         7439-95-4       Magnesium       899       B       E       P         7439-96-5       Manganese       41.5       E       P         7440-02-0       Nickel       2.4       B       P         7440-09-7       Potassium       100       B       P         7440-22-4       Silver       0.46       U       P         7440-23-5       Sodium       129       B       P         7440-28-0       Thallium       0.41       N       P         7440-62-2       Vanadium       5.1       B       P	7440-48-4	Cobalt	2.0	В		P
7439-89-6       Iron       4820       E       P         7439-97-6       Mercury       0.04       U       CV         7439-97-6       Lead       1.5       P         7439-92-1       Lead       1.5       P         7439-95-4       Magnesium       899       E       P         7439-96-5       Manganese       41.5       E       P         7440-02-0       Nickel       2.4       E       P         7440-09-7       Potassium       100       B       P         7440-22-4       Silver       0.61       U       P         7440-23-5       Sodium       129       B       P         7440-28-0       Thallium       0.41       N       P         7440-62-2       Vanadium       5.1       B       P	7440-50-8	Copper	1.3	B	1	P
7439-97-6       Mercury       0.04       U       CV         7439-92-1       Lead       1.5       P         7439-95-4       Magnesium       899       B       E       P         7439-95-4       Magnesium       899       B       E       P         7439-96-5       Manganese       41.5       E       P         7440-02-0       Nickel       2.4       B       P         7440-09-7       Potassium       100       B       P         7440-22-4       Selenium       0.61       U       P         7440-23-5       Sodium       129       B       P         7440-28-0       Thallium       0.41       N       P         7440-62-2       Vanadium       5.1       B       P	7439-89-6	Iron	4820		E	P
7439-92-1       Lead       1.5       P         7439-95-4       Magnesium       899       B       P         7439-96-5       Manganese       41.5       E       P         7440-02-0       Nickel       2.4       B       P         7440-09-7       Potassium       100       B       P         7440-22-4       Selenium       0.61       U       P         7440-22-4       Silver       0.46       U       P         7440-23-5       Sodium       129       B       P         7440-28-0       Thallium       0.41       N       P         7440-62-2       Vanadium       5.1       B       P	7439-97-6	Mercury	0.04	ס		CV
7439-95-4       Magnesium       899       B       E       P         7439-96-5       Manganese       41.5       E       P         7440-02-0       Nickel       2.4       E       P         7440-09-7       Potassium       100       E       P         7440-22-4       Selenium       0.61       U       P         7440-22-4       Silver       0.46       U       P         7440-23-5       Sodium       129       B       P         7440-28-0       Thallium       0.41       N       P         7440-66-6       Zinc       12.9       E       P	7439-92-1	Lead	1.5			P
7439-96-5       Manganese       41.5       E       P         7440-02-0       Nickel       2.4       B       P         7440-09-7       Potassium       100       B       P         7782-49-2       Selenium       0.61       U       P         7440-22-4       Silver       0.46       U       P         7440-23-5       Sodium       129       B       P         7440-28-0       Thallium       0.41       N       P         7440-62-2       Vanadium       5.1       B       P	7439-95-4	Magnesium	899	В	E	P
7440-02-0       Nickel       2.4       B       P         7440-09-7       Potassium       100       B       P         7782-49-2       Selenium       0.61       U       P         7440-22-4       Silver       0.46       U       P         7440-23-5       Sodium       129       B       P         7440-28-0       Thallium       0.41       N       P         7440-62-2       Vanadium       5.1       B       P         7440-66-6       Zinc       12.9       E       P	7439-96-5	Manganese	41.5	[	B	P
7440-09-7       Potassium       100       B       P         7782-49-2       Selenium       0.61       U       P         7440-22-4       Silver       0.46       U       P         7440-23-5       Sodium       129       B       P         7440-28-0       Thallium       0.41       N       P         7440-62-2       Vanadium       5.1       B       P         7440-66-6       Zinc       12.9       E       P	7440-02-0	Nickel	2.4	В		P
7782-49-2       Selenium       0.61       U       P         7440-22-4       Silver       0.46       U       P         7440-23-5       Sodium       129       B       P         7440-28-0       Thallium       0.41       V       N       P         7440-62-2       Vanadium       5.1       B       P         7440-66-6       Zinc       12.9       E       P	7440-09-7	Potassium	100	В		P
7440-22-4       Silver       0.46       0       P         7440-23-5       Sodium       129       B       P         7440-28-0       Thallium       0.41       0       N       P         7440-62-2       Vanadium       5.1       B       P         7440-66-6       Zinc       12.9       E       P	7782-49-2	Selenium	0.61	ש		P
7440-23-5       Sodium       129       B       P         7440-28-0       Thallium       0.41       V       N       P         7440-62-2       Vanadium       5.1       B       P         7440-66-6       Zinc       12.9       E       P	7440-22-4	Silver	0.46	ש		P
7440-28-0       Thallium       0.41       V       N       P         7440-62-2       Vanadium       5.1       B       P         7440-66-6       Zinc       12.9       E       P	7440-23-5	Sodium	129	В		P
7440-62-2         Vanadium         5.1         B         P           7440-66-6         Zinc         12.9         E         P	7440-28-0	Thallium	0.41	ש	N	Р
7440-66-6 Zinc 12.9 E P	7440-62-2	Vanadium	5.1	В		Р
	7440-66-6	Zinc	12.9		E	P

Color Before:	 Clarity Before:	 Texture:	·	
Color After:	 Clarity After:	 Artifacts:		
Comments:		 		
-		 		

## INORGANIC ANALYSES DATA SHEET

		ШV	ORGANIC AN		ATA SHEET		I	EPA SAMPLE NO.	
							5	SD-8-SU-07-18	~
Lab Name:	Adirondack	Environmenta	al Con	ntract:	Black Ash	Pond			
Lab Code:	AES	Case No.:	ESE 0702	SAS No.:		SDG	No.:	SD-7-SU-07-6	
Matrix (so	il/water):	SOIL		Lab	Sample ID:	070	522060	-004A	
Level (low	/med): <u>LO</u>	<u>w</u>		Dat	e Received:	6/22	2/2007		

% Solids: 77

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Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration		Q	м
7429-90-5	Aluminum	3920		E	Р
7440-36-0	Antimony	4.2	ם]		Р
7440-38-2	Arsenic	0.63	ס	N	Р
7440-39-3	Barium	22.0	В		P
7440-41-7	Beryllium	0.08	ס		P
7440-42-8	Boron	1.9	ס		P
7440-43-9	Cadmium	0.13	۵		P
7440-70-2	Calcium	2100		E	P
7440-47-3	Chromium	1.0	В		P
7440-48-4	Cobalt	3.3	В		₽
7440-50-8	Copper	0.82	В		P
7439-89-6	Iron	8990		E	P
7439-97-6	Mercury	0.04	ש		CV
7439-92-1	Lead	1.3			P
7439-95-4	Magnesium	1900		B	P
7439-96-5	Manganese	88.2		E	P
7440-02-0	Nickel	3.1	В		P
7440-09-7	Potassium	143	В		P
7782-49-2	Selenium	0.63	ש		P
7440-22-4	Silver	0.47	σ		P
7440-23-5	Sodium	172	в		Р
7440-28-0	Thallium	0.42	σ	N	P
7440-62-2	Vanadium	5.7	В		P
7440-66-6	Zinc	20.6		E	P

Color Before:	Clarity Before:	Texture:
Color After:	Clarity After:	Artifacts:
Comments:		

## INORGANIC ANALYSES DATA SHEET

Lab Name:       Adirondack Environmental       Contract:       Black Ash Pond         Lab Code:       AES       Case No.:       ESE 0702       SAS No.:       SDG No.:       SD-7-SU-07-6         Matrix (soil/water):       SOIL       Lab Sample ID:       070622060-005A		Etok	OALIC ALADIOED D		EPA SAMPLE NO.
Lab Name: Adirondack Environmental Contract: Black Ash Pond Lab Code: AES Case No.: ESE 0702 SAS No.: SDG No.: SD-7-SU-07-6 Matrix (soil/water): SOIL Lab Sample ID: 070622060-005A					SD-9-SU-07-6
Lab Code:         AES         Case No.:         ESE 0702         SAS No.:         SDG No.:         SD-7-SU-07-6           Matrix (soil/water):         SOIL         Lab Sample ID:         070622060-005A	Lab Name: Adir	ondack Environmental	Contract:	Black Ash Pon	d
Matrix (soil/water): SOIL Lab Sample ID: 070622060-005A	Lab Code: _AES	Case No.: ES	E 0702 SAS No.:		SDG No.: <u>SD-7-SU-07-6</u>
	Matrix (soil/wate	er): SOIL	Lat	Sample ID:	070622060-005A
Level (low/med): LOW Date Received: 6/22/2007	Level (low/med):	LOW	Dat	ce Received:	6/22/2007

% Solids: 97

Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration		Q	м
7429-90-5	Aluminum	3330	1	Ē	P
7440-36-0	Antimony	3.3	ש		P
7440-38-2	Arsenic	0.50	σ	N	P
7440-39-3	Barium	8.8	B	1	P
7440-41-7	Beryllium	0.06	<b>ʊ</b>		P
7440-42-8	Boron	1.5	ਹ		P
7440-43-9	Cadmium	0.10	ם		P
7440-70-2	Calcium	2320		E	P
7440-47-3	Chromium	1.0	В		P
7440-48-4	Cobalt	1.9	В		P
7440-50-8	Copper	0.52	B		P
7439-89-6	Iron	5050		E	P
7439-97-6	Mercury	0.03	סן	[	CV
7439-92-1	Lead	1.2			P
7439-95-4	Magnesium	1020	В	E	P
7439-96-5	Manganese	47.1	1	E	Р
7440-02-0	Nickel	1.9	В	[	P
7440-09-7	Potassium	150	В		P
7782-49-2	Selenium	0.50	ש		P
7440-22-4	Silver	0.37	ס		P
7440-23-5	Sodium	283	В		P
7440-28-0	Thallium	0.33	σ	N	P
7440-62-2	Vanadium	2.3	В		P
7440-66-6	Zinc	13.0		E	Р

Color Before:		Clarity Before:	 Texture:	
Color After:		Clarity After:	 Artifacts:	
Comments:	<u>_</u>			
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#### INORGANIC ANALYSES DATA SHEET

ETOROALITE ANADIOLO DATA SHEET	EPA SAMPLE NO.
	SD-9-SU-07-18
Lab Name: Adirondack_Environmental Contract: Black Ash Pond	
Lab Code: AES Case No.: SDG N	No.: <u>SD-7-SU-07-6</u>
Matrix (soil/water): SOIL Lab Sample ID: 07062	22060-006A
Level (low/med): LOW Date Received: 6/22,	/2007

% Solids: 77

Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	с	Q	м
7429-90-5	Aluminum	3900		E	P
7440-36-0	Antimony	4.2	ס	<u> </u>	l P
7440-38-2	Arsenic	0.63	ד	N	P
7440-39-3	Barium	13.1	B		P
7440-41-7	Beryllium	0.08	ש	Ī	P
7440-42-8	Boron	1.9	ש	1	P
7440-43-9	Cadmium	0.13	ס		P
7440-70-2	Calcium	2130	1	E	P
7440-47-3	Chromium	1.0	в		P
7440-48-4	Cobalt	2.6	В		P
7440-50-8	Copper	0.52	В		Р
7439-89-6	Iron	7950		E	Р
7439-97-6	Mercury	0.04	ד		CV
7439-92-1	Lead	0.42	ש	I	P
7439-95-4	Magnesium	983	в	E	P
7439-96-5	Manganese	90.8	l	E	P
7440-02-0	Nickel	2.2	В		Р
7440-09-7	Potassium	121	B		Р
	TOTASSIUM		-		
7782-49-2	Selenium	0.63	<u>ד</u>		P
7782-49-2 7440-22-4	Silver	0.63	<u>ד</u> ד		P P
7782-49-2 7440-22-4 7440-23-5	Selenium Silver Sodium	0.63 0.47 400	ט ד ד ש		P P P
7782-49-2 7440-22-4 7440-23-5 7440-28-0	Selenium Silver Sodium Thallium	0.63 0.47 400 0.42	U U B U	   	P P P
7782-49-2 7440-22-4 7440-23-5 7440-28-0 7440-62-2	Selenium Silver Sodium Thallium Vanadium	0.63 0.47 400 0.42 4.3	U U B U B	N	P P P P

Color Before:	 Clarity Before:	 Texture:	
Color After:	 Clarity After:	 Artifacts:	
Comments:	. <u>.</u>	 	
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## INORGANIC ANALYSES DATA SHEET

							E	PA SAMPLE NO.	
							S	D-10-SU-07-6	
Lab Name:	Adirondack	Environmenta	al Co	ntract:	Black Ash	Pond		<u> </u>	
Lab Code:	AES	Case No.:	ESE 0702	SAS No.:		SDG	No.:	SD-7-SU-07-6	
Matrix (soi)	l/water):	SOIL		Lab	Sample ID:	0706	\$22060-	-007A	
Level (low/m	ned): LOV	J		Dat	e Received:	<u>6/2</u> 2	2007		

*	Solids:	77
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Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration		Q	м
7429-90-5	Aluminum	4950	1	E	P
7440-36-0	Antimony	4.2	ם		P
7440-38-2	Arsenic	0.63	۱ <u>م</u>	N	P
7440-39-3	Barium	8.5	B		P
7440-41-7	Beryllium	0.08	ם		P
7440-42-8	Boron	1.9	ש		P
7440-43-9	Cadmium	0.13	٦ D		P
7440-70-2	Calcium	3390		E	P
7440-47-3	Chromium	1.8	В		P
7440-48-4	Cobalt	2.2	В		P
7440-50-8	Copper	1.0	В		P
7439-89-6	Iron	5050		B	P
7439-97-6	Mercury	0.04	ש		CV
7439-92-1	Lead	0.42	ס		P
7439-95-4	Magnesium	1030	В	E	P
7439-96-5	Manganese	36.6		E	P
7440-02-0	Nickel	3.1	В		P
7440-09-7	Potassium	136	В		P
7782-49-2	Selenium	0.63	σ		Р
7440-22-4	Silver	0.47	ס		P
7440-23-5	Sodium	526	в		P
7440-28-0	Thallium	0.42	ש	N	P
7440-62-2	Vanadium	1.1	σ		P
7440-66-6	Zinc	11.0		E	P

Color Before: -	 Clarity Before:	 Texture:	
Color After: -	 Clarity After:	 Artifacts:	
Comments:	 	 	

## INORGANIC ANALYSES DATA SHEET

						SI	D-10-SU-07-18
Lab Name:	Adirondack	Environmenta	al Co	ntract:	Black Ash Por	nd	
Lab Code:	AES	Case No.:	ESE 0702	SAS No.:	······································	SDG No.:	<u>SD-7-SU-07-6</u>
Matrix (soil	/water):	SOIL		Lab	Sample ID:	070622060-	008A
Level (low/m	ned): LOI	W		Dat	e Received:	6/22/2007	

% Solids: 77

Concentration Units (ug/L or mg/kg dry weight):

MG/KG

EPA SAMPLE NO.

CAS No.	Analyte	Concentration	c	Q	м
7429-90-5	Aluminum	3620	Î	E	P
7440-36-0	Antimony	4.2	סן		P
7440-38-2	Arsenic	0.62	ש	N	P
7440-39-3	Barium	10.1	В	l l	P
7440-41-7	Beryllium	0.08	ש		Р
7440-42-8	Boron	1.9	ס		P
7440-43-9	Cadmium	0.13	סן	1	P
7440-70-2	Calcium	3220	[	E	P
7440-47-3	Chromium	2.0	в		P
7440-48-4	Cobalt	2.5	в		P
7440-50-8	Copper	0.77	в		P
7439-89-6	Iron	5580		E	P
7439-97-6	Mercury	0.04	ש		CV
7439-92-1	Lead	0.66	в		P
7439-95-4	Magnesium	1350		E	P
7439-96-5	Manganese	45.7		Е	Р
7440-02-0	Nickel	2.9	В		P
7440-09-7	Potassium	171	В		P
7782-49-2	Selenium	0.62	ש		P
7440-22-4	Silver	0.47	υ		P
7440-23-5	Sodium	314	в		P
7440-28-0	Thallium	0.41	ש	N	P
7440-62-2	Vanadium	2.7	в	i i	P
7440-66-6	Zinc	14.9		E	P

Color Before:	 Clarity Before:		Texture:	
Color After:	 Clarity After:		Artifacts:	
Comments:		,,		

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## INORGANIC ANALYSES DATA SHEET

SD-11-SU-07-6	
Lab Name: Adirondack Environmental Contract: Black Ash Pond	
Lab Code: AES Case No.: ESE 0702 SAS No.: SDG No.: SD-7-SU-07-6	
Matrix (soil/water): SOIL Lab Sample ID: 070622060-009A	
Level (low/med): LOW Date Received: 6/22/2007	

% Solids: 75

Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	с	Q	м
7429-90-5	Aluminum	3890	Í	E	Р
7440-36-0	Antimony	4.9	В		P
7440-38-2	Arsenic	0.68	В	N	P
7440-39-3	Barium	9.9	B		Р
7440-41-7	Beryllium	0.08	ס		Р
7440-42-8	Boron	2.0	סן		P
7440-43-9	Cadmium	0.13	ש		Р
7440-70-2	Calcium	2320	[	E	P
7440-47-3	Chromium	1.3	В		P
7440-48-4	Cobalt	2.9	в	1	P
7440-50-8	Copper	0.53	ס		P
7439-89-6	Iron	7090		E	Р
7439-97-6	Mercury	0.04	σ		CV
7439-92-1	Lead	0.79	в		P
7439-95-4	Magnesium	1480		E	P
7439-96-5	Manganese	59.6		E	P
7440-02-0	Nickel	3.1	В		Р
7440-09-7	Potassium	161	В		P
7782-49-2	Selenium	0.64	σ		₽
7440-22-4	Silver	0.48	σ		P
7440-23-5	Sodium	311	в		Р
7440-28-0	Thallium	0.43	υ	N	Р
7440-62-2	Vanadium	3.1	В	L	P
7440-66-6	Zinc	17.3		E	P

Color Before:	·	Clarity Before:	 Texture:	
Color After:		Clarity After:	 Artifacts:	
Comments:	·····		 	
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### INORGANIC ANALYSES DATA SHEET

		111	ORGANIC AN	ALISESDA	ATA SHEET		EPA SAMPLE NO.	
							SD-11-SU-07-18	
Lab Name:	Adirondack	Environmenta	al Co	stract:	Black Ash P	ond	······································	
Lab Code:	AES	Case No.:	ESE 0702	SAS No.:		SDG No	.: <u>SD-7-SU-07-6</u>	-
Matrix (soi]	l/water):	SOIL		Lab	Sample ID:	070622	2060-010A	
Level (low/m	ned): LOW	·		Dat	e Received:	6/22/2	2007	

% Solids: 77

Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	C	Q	м
7429-90-5	Aluminum	4480	i –	E	P
7440-36-0	Antimony	4.2	ם		P
7440-38-2	Arsenic	0.63	ש	N	P
7440-39-3	Barium	21.3	B		Р
7440-41-7	Beryllium	0.08	ס		P
7440-42-8	Boron	1.9	ש		P
7440-43-9	Cadmium	0.13	סן		P
7440-70-2	Calcium	2940		E	P
7440-47-3	Chromium	1.3	В		P
7440-48-4	Cobalt	2.5	В		P
7440-50-8	Copper	0.98	В		P
7439-89-6	Iron	5230	]	E	P
7439-97-6	Mercury	0.04	סן		CV
7439-92-1	Lead	0.44	В		P
7439-95-4	Magnesium	1190	В	E	Р
7439-96-5	Manganese	37.3	[	E	P
7440-02-0	Nickel	2.7	В		P
7440-09-7	Potassium	181	в		P
7782-49-2	Selenium	0.63	ם	!	P
7440-22-4	Silver	0.47	ש		P
7440-23-5	Sodium	483	В	ł	P
7440-28-0	Thallium	0.42	ש	N	P
7440-62-2	Vanadium	1.1	в	[	P
7440-66-6	Zinc	17.6	1	E	Р

Color Before:		Clarity Before:	 Texture:	
Color After:		Clarity After:	 Artifacts:	
Comments:			 	
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## INORGANIC ANALYSES DATA SHEET

Lab Name:       Adirondack Environmental       Contract:       Black Ash Pond         Lab Code:       AES       Case No.:       ESE 0702       SAS No.:       SDG No.:       SD-7-SU-07-6			2.01012.10		IA SHEET		EPA SAMPLE NO.
Lab Name: Adirondack Environmental Contract: Black Ash Pond							WM-2-SU-07-6
Lab Code: AES Case No.: ESE 0702 SAS No.: SDG No.: SD-7-SU-07-6	Lab Name: Ad	lirondack Envi	ronmental	Contract:	Black Ash F	ond	· · ·
	Lab Code: <u>A</u>	<u>ES</u> Ca	se No.: ESE 070	2 SAS No.:		SDG No.:	<u>SD-7-SU-07-6</u>
Matrix (soil/water): SOIL Lab Sample ID: 070622060-012A	Matrix (soil/w	ater): SOII	· · · · -	Lab	Sample ID:	070622060	)-012A
Level (low/med): LOW Date Received: 6/22/2007	Level (low/med	.): <u>LOW</u>		Date	a Received:	6/22/2007	<u> </u>

% Solids: 80

Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	c	Q	м
7429-90-5	Aluminum	1890	$\uparrow$	E	P
7440-36-0	Antimony	4.1	ס	1	P
7440-38-2	Arsenic	8.1		N	P
7440-39-3	Barium	40.3	В		P
7440-41-7	Beryllium	0.30	В		P
7440-42-8	Boron	1.9	ם	]	P
7440-43-9	Cadmium	0.15	В	1	P
7440-70-2	Calcium	1090	В	E	Р
7440-47-3	Chromium	6.2		b	P
7440-48-4	Cobalt	4.8	B	1	P
7440-50-8	Copper	21.7			P
7439-89-6	Iron	3640		E	P
7439-97-6	Mercury	0.24	[		cv
7439-92-1	Lead	16.9			P
7439-95-4	Magnesium	143	в	E	P
7439-96-5	Manganese	39.3		E	P
7440-02-0	Nickel	12.9			Р
7440-09-7	Potassium	148	В		P
7782-49-2	Selenium	1.6			P
7440-22-4	Silver	0.45	ש		P
7440-23-5	Sodium	42.7	в		P
7440-28-0	Thallium	0.40	σ	N	P
7440-62-2	Vanadium	18.2			P
7440-66-6	Zinc	13.1		B	P

Color Before:	 Clarity	Before:	 Texture:	 
Color After:	 Clarity	After:	 Artifacts:	 
Comments:			 	

## INORGANIC ANALYSES DATA SHEET

			onoin de m		ATA OHEET		EPA SAMPLE NO.	
							WM-3-SU-07-9	
Lab Name:	Adirondack	Environmenta	<u>al</u> Co	ntract:	Black Ash B	ond		
Lab Code:	AES	Case No.:	ESE 0702	SAS No.:		SDG No.	: <u>SD-7-SU-07-6</u>	
Matrix (soi)	l/water):	SOIL		Lab	Sample ID:	070622	060-013A	
Level (low/n	ned): LOI	<u>v</u>		Dat	e Received:	6/22/2	007	

% Solids: 71

Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	20200	1	E	P
7440-36-0	Antimony	4.6	ש		P
7440-38-2	Arsenic	23.6	1	N	P
7440-39-3	Barium	448		1	P
7440-41-7	Beryllium	2.4			P
7440-42-8	Boron	2.1	ס		P
7440-43-9	Cadmium	0.29	В		P
7440-70-2	Calcium	10400		E	P
7440-47-3	Chromium	17.9	1		P
7440-48-4	Cobalt	15.9	1		P
7440-50-8	Copper	40.8			P
7439-89-6	Iron	14400	]	E	P
7439-97-6	Mercury	0.99	1	1	CV
7439-92-1	Lead	13.8			P
7439-95-4	Magnesium	1480		B	P
7439-96-5	Manganese	524		E	P
7440-02-0	Nickel	33.9			P
7440-09-7	Potassium	3080			P
7782-49-2	Selenium	0.68	ש		P
7440-22-4	Silver	0.51	ס		P
7440-23-5	Sodium	236	В		P
7440-28-0	Thallium	0.45	ש	N	P
7440-62-2	Vanadium	32.4			P
7440-66-6	Zinc	70.1		E	P

Color Before:	 Clarity Before:		Texture:	
Color After:	 Clarity After:		Artifacts:	
Comments:	 		·	
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## INORGANIC ANALYSES DATA SHEET

				EPA SAMPLE NO.
				WM-4-SU-07-8
Lab Name: <u>Adironda</u>	ck Environmental	Contract:	Black Ash Pond	
Lab Code: AES	Case No.: ESE	0702 SAS No.:	SD	G No.: SD-7-SU-07-6
Matrix (soil/water):	SOIL	Lab	Sample ID: 07	0622060-014A
Level (low/med):	LOW	Dat	e Received: <u>6/</u>	22/2007

8	Sol	ids	:	80
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Concentration Unit	s (ug/L or	mg/kg dry	weight):
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CAS NO.         Analyte         Concentration         C         Q         M           7429-90-5         Aluminum         3500         E         P           7440-36-0         Antimony         4.1         V         P           7440-38-2         Arsenic         8.4         N         P           7440-39-3         Barium         50.7         P           7440-41-7         Beryllium         0.58         P         P           7440-42-8         Boron         1.9         V         P           7440-43-9         Cadmium         0.18         B         P           7440-43-9         Calcium         2330         E         P           7440-47-3         Chromium         5.9         P         P           7440-48-4         Cobalt         3.4         B         P           7439-99-6         Iron         4360						
7429-90-5       Aluminum       3500       E       P         7440-36-0       Antimony       4.1       U       P         7440-38-2       Arsenic       8.4       N       P         7440-39-3       Barium       50.7       P         7440-41-7       Beryllium       0.58       B       P         7440-42-8       Boron       1.9       U       P         7440-43-9       Cadmium       0.18       B       P         7440-43-9       Cadmium       0.18       B       P         7440-47-3       Chromium       5.9       P       P         7440-48-4       Cobalt       3.4       B       P         7439-89-6       Iron       4360       E       P         7439-97-6       Mercury       0.31       CV         7439-92-1       Lead       18.2       P         7439-95-4       Magnesium       395       E       P         7440-02-0       Nickel       8.4       P       P         7440-02-0       Nickel       8.4       P       P         7440-02-0       Nickel       8.4       P       P         7440-02-0 <t< td=""><td>CAS No.</td><td>Analyte</td><td>Concentration</td><td>с</td><td>Q</td><td>м</td></t<>	CAS No.	Analyte	Concentration	с	Q	м
7440-36-0       Antimony       4.1       U       P         7440-38-2       Arsenic       8.4       N       P         7440-39-3       Barium       50.7       P         7440-41-7       Beryllium       0.58       P       P         7440-42-8       Boron       1.9       V       P         7440-43-9       Cadmium       0.18       P       P         7440-44-4       Cobalt       3.4       P       P         7440-50-8       Copper       16.8       P       P         7439-89-6       Iron       4360       E       P         7439-97-6       Mercury       0.31       CV         7439-95-4       Magnesium       395       B       P         7440-02-0       Nickel       8.4       B       P         7440-02-0       Nickel       8.4       P       P         744	7429-90-5	Aluminum	3500	1	E	Ţ₽
7440-38-2       Arsenic       8.4       N       P         7440-39-3       Barium       50.7       P         7440-41-7       Beryllium       0.58       B       P         7440-42-8       Boron       1.9       V       P         7440-43-9       Cadmium       0.18       B       P         7440-43-9       Cadmium       0.18       B       P         7440-47-3       Chromium       5.9       P         7440-48-4       Cobalt       3.4       B       P         7440-48-4       Cobalt       3.4       B       P         7440-50-8       Copper       16.8       P         7439-89-6       Iron       4360       E       P         7439-97-6       Mercury       0.31       CV         7439-92-1       Lead       18.2       P         7439-95-4       Magnesium       395       B       P         7440-02-0       Nickel       8.4       B       P         7440-02-0       Nickel       8.4       B       P         7440-09-7       Potassium       2.0       P       P         7440-23-5       Sodium       87.5	7440-36-0	Antimony	4.1	ש		P
7440-39-3       Barium       50.7       P         7440-41-7       Beryllium       0.58       B       P         7440-42-8       Boron       1.9       V       P         7440-43-9       Cadmium       0.18       B       P         7440-43-9       Calcium       2330       E       P         7440-47-3       Chromium       5.9       P         7440-48-4       Cobalt       3.4       B       P         7440-50-8       Copper       16.8       P         7439-89-6       Iron       4360       E       P         7439-97-6       Mercury       0.31       CV         7439-95-4       Magnesium       395       B       E       P         7440-02-0       Nickel       8.4       P       P         7440-02-0       Nickel       8.4       P       P         7440-02-0       Nickel       8.4       P       P         7440-23-5       Sodium       87.5       P       P         7440-23-5       Sodium       87.5       P       P         7440-23-5       Sodium       87.5       P       P         7440-23-5 <td< td=""><td>7440-38-2</td><td>Arsenic</td><td>8.4</td><td>T</td><td>N</td><td>P</td></td<>	7440-38-2	Arsenic	8.4	T	N	P
7440-41-7       Beryllium       0.58       B       P         7440-42-8       Boron       1.9       V       P         7440-43-9       Cadmium       0.18       B       P         7440-70-2       Calcium       2330       E       P         7440-47-3       Chromium       5.9       P         7440-48-4       Cobalt       3.4       B       P         7440-50-8       Copper       16.8       P         7439-89-6       Iron       4360       E       P         7439-97-6       Mercury       0.31       CV         7439-92-1       Lead       18.2       P         7440-02-0       Nickel       8.4       P       P         7440-02-0       Nickel       8.4       P       P         7440-02-0       Nickel       8.4       P       P         7440-23-5       Sodium       87.5       P       P         7440-23-5       Sodium <t< td=""><td>7440-39-3</td><td>Barium</td><td>50.7</td><td></td><td>Ī</td><td>P</td></t<>	7440-39-3	Barium	50.7		Ī	P
7440-42-8       Boron       1.9       U       P         7440-43-9       Cadmium       0.18       B       P         7440-70-2       Calcium       2330       E       P         7440-70-2       Calcium       2330       E       P         7440-70-2       Calcium       2330       E       P         7440-47-3       Chromium       5.9       P         7440-48-4       Cobalt       3.4       B       P         7440-50-8       Copper       16.8       P         7439-89-6       Iron       4360       E       P         7439-97-6       Mercury       0.31       CV         7439-97-1       Lead       18.2       P         7439-95-4       Magnesium       395       E       P         7440-02-0       Nickel       8.4       B       P         7440-02-0       Nickel       8.4       B       P         7440-22-4       Silver       0.45       U       P         7440-23-5       Sodium       87.5       P       P         7440-28-0       Thallium       0.40       N       P         7440-62-2       Vanadium	7440-41-7	Beryllium	0.58	В		P
7440-43-9       Cadmium       0.18       B       P         7440-70-2       Calcium       2330       E       P         7440-47-3       Chromium       5.9       P         7440-48-4       Cobalt       3.4       B       P         7440-50-8       Copper       16.8       P         7439-89-6       Iron       4360       E       P         7439-97-6       Mercury       0.31       CV         7439-97-6       Mercury       0.31       CV         7439-92-1       Lead       18.2       P         7439-95-4       Magnesium       395       E       P         7440-02-0       Nickel       8.4       B       P         7440-02-0       Nickel       8.4       P       P         7440-02-0       Nickel       8.4       P       P         7440-02-0       Nickel       8.4       P       P         7440-22-4       Silver       0.45       U       P         7440-23-5       Sodium       87.5       B       P         7440-28-0       Thallium       0.40       W       N       P         7440-62-2       Vanadium	7440-42-8	Boron	1.9	ש	]	P
7440-70-2       Calcium       2330       E       P         7440-47-3       Chromium       5.9       P         7440-48-4       Cobalt       3.4       B       P         7440-50-8       Copper       16.8       P         7439-89-6       Iron       4360       E       P         7439-97-6       Mercury       0.31       CV         7439-92-1       Lead       18.2       P         7439-95-4       Magnesium       395       B       E       P         7440-02-0       Nickel       8.4       B       P         7440-02-0       Nickel       8.4       P       P         7440-02-0       Nickel       8.4       P       P         7440-22-4       Silver       0.45       U       P         7440-23-5       Sodium       87.5       B       P         7440-28-0       Thallium       0.40       U       N       P         7440-22-2       Vanadium       11.8       B       P         7440-66-6       Zinc       16.0       E       P	7440-43-9	Cadmium	0.18	в		P
7440-47-3       Chromium       5.9       P         7440-48-4       Cobalt       3.4       B       P         7440-50-8       Copper       16.8       P         7439-89-6       Iron       4360       E       P         7439-97-6       Mercury       0.31       CV         7439-97-6       Mercury       0.31       CV         7439-97-6       Mercury       0.31       P         7439-95-4       Magnesium       395       B       P         7440-02-0       Nickel       8.4       B       P         7440-09-7       Potassium       2.0       P         7440-22-4       Silver       0.45       U       P         7440-23-5       Sodium       87.5       B       P         7440-23-5       Sodium       0.40       N       P         7440-62-2       Vanadium       11.8       P       P         7440-66-6 <td>7440-70-2</td> <td>Calcium</td> <td>2330</td> <td>1</td> <td>B</td> <td>P</td>	7440-70-2	Calcium	2330	1	B	P
7440-48-4       Cobalt       3.4       B       P         7440-50-8       Copper       16.8       P         7439-89-6       Iron       4360       E       P         7439-97-6       Mercury       0.31       CV         7439-97-6       Mercury       0.31       CV         7439-92-1       Lead       18.2       P         7439-95-4       Magnesium       395       B       E       P         7440-02-0       Nickel       8.4       B       P         7440-09-7       Potassium       222       B       P         7440-23-5       Sclenium       2.0       P         7440-23-5       Sodium       87.5       B       P         7440-28-0       Thallium       0.40       N       P         7440-62-2       Vanadium       11.8       B       P         7440-66-6       Zinc       16.0       E       P	7440-47-3	Chromium	5.9		1	P
7440-50-8       Copper       16.8       P         7439-89-6       Iron       4360       E       P         7439-97-6       Mercury       0.31       CV         7439-97-6       Mercury       0.31       P         7439-97-6       Mercury       0.31       CV         7439-92-1       Lead       18.2       P         7439-95-4       Magnesium       395       B       E       P         7440-02-0       Nickel       8.4       B       P         7440-09-7       Potassium       222       B       P         7440-22-4       Silver       0.45       P         7440-23-5       Sodium       87.5       B       P         7440-23-5       Sodium       87.5       P       P         7440-23-5       Sodium       11.8       P       P         7440-62-2       Vanadium       11.8       P       P	7440-48-4	Cobalt	3.4	В	1	P
7439-89-6       Iron       4360       E       P         7439-97-6       Mercury       0.31       CV         7439-97-6       Mercury       0.31       P         7439-92-1       Lead       18.2       P         7439-95-4       Magnesium       395       E       P         7439-95-4       Magnesium       395       B       E       P         7439-96-5       Manganese       87.9       E       P         7440-02-0       Nickel       8.4       B       P         7440-09-7       Potassium       222       B       P         7440-22-4       Silver       0.455       U       P         7440-23-5       Sodium       87.5       B       P         7440-23-5       Sodium       0.40       N       P         7440-28-0       Thallium       0.40       N       P         7440-62-2       Vanadium       11.8       P       P         7440-66-6       Zinc       16.0       E       P	7440-50-8	Copper	16.8	1		P
7439-97-6       Mercury       0.31       CV         7439-92-1       Lead       18.2       P         7439-95-4       Magnesium       395       B       P         7439-96-5       Manganese       87.9       E       P         7440-02-0       Nickel       8.4       B       P         7440-09-7       Potassium       222       B       P         7440-22-4       Selenium       2.0       P         7440-23-5       Sodium       87.5       B       P         7440-23-5       Sodium       87.5       B       P         7440-23-5       Sodium       87.5       B       P         7440-28-0       Thallium       0.40       N       P         7440-62-2       Vanadium       11.8       B       P         7440-66-6       Zinc       16.0       E       P	7439-89-6	Iron	4360	Ι	E	P
7439-92-1       Lead       18.2       P         7439-95-4       Magnesium       395       B       E       P         7439-96-5       Manganese       87.9       E       P         7440-02-0       Nickel       8.4       B       P         7440-09-7       Potassium       222       B       P         7440-22-4       Selenium       2.0       P         7440-23-5       Sodium       87.5       B       P         7440-23-5       Sodium       87.5       B       P         7440-28-0       Thallium       0.40       W       P         7440-62-2       Vanadium       11.8       B       P         7440-66-6       Zinc       16.0       E       P	7439-97-6	Mercury	0.31	1		CV
7439-95-4       Magnesium       395       B       E       P         7439-96-5       Manganese       87.9       E       P         7440-02-0       Nickel       8.4       B       P         7440-09-7       Potassium       222       B       P         7782-49-2       Selenium       2.0       P         7440-22-4       Silver       0.45       U       P         7440-23-5       Sodium       87.5       B       P         7440-28-0       Thallium       0.40       U       N       P         7440-62-2       Vanadium       11.8       B       P         7440-66-6       Zinc       16.0       E       P	7439-92-1	Lead	18.2			P
7439-96-5       Manganese       87.9       E       P         7440-02-0       Nickel       8.4       B       P         7440-09-7       Potassium       222       B       P         7782-49-2       Selenium       2.0       P         7440-22-4       Silver       0.45       U       P         7440-23-5       Sodium       87.5       B       P         7440-28-0       Thallium       0.40       U       N       P         7440-62-2       Vanadium       11.8       B       P         7440-66-6       Zinc       16.0       E       P	7439-95-4	Magnesium	395	В	E	P
7440-02-0       Nickel       8.4       B       P         7440-09-7       Potassium       222       B       P         7782-49-2       Selenium       2.0       P         7440-22-4       Silver       0.45       U       P         7440-23-5       Sodium       87.5       B       P         7440-28-0       Thallium       0.40       U       N       P         7440-62-2       Vanadium       11.8       B       P         7440-66-6       Zinc       16.0       E       P	7439-96-5	Manganese	87.9	1	E	P
7440-09-7       Potassium       222       B       P         7782-49-2       Selenium       2.0       P         7440-22-4       Silver       0.45       V       P         7440-23-5       Sodium       87.5       B       P         7440-28-0       Thallium       0.40       V       N       P         7440-62-2       Vanadium       11.8       B       P         7440-66-6       Zinc       16.0       E       P	7440-02-0	Nickel	8.4	B		P
7782-49-2       Selenium       2.0       P         7440-22-4       Silver       0.45       U       P         7440-23-5       Sodium       87.5       B       P         7440-28-0       Thallium       0.40       U       N       P         7440-62-2       Vanadium       11.8       B       P         7440-66-6       Zinc       16.0       E       P	7440-09-7	Potassium	222	в		P
7440-22-4       Silver       0.45       U       P         7440-23-5       Sodium       87.5       B       P         7440-28-0       Thallium       0.40       U       N       P         7440-62-2       Vanadium       11.8       B       P         7440-66-6       Zinc       16.0       E       P	7782-49-2	Selenium	2.0			P
7440-23-5       Sodium       87.5       B       P         7440-28-0       Thallium       0.40       U       N       P         7440-62-2       Vanadium       11.8       B       P         7440-66-6       Zinc       16.0       E       P	7440-22-4	Silver	0.45	ס		P
7440-28-0       Thallium       0.40       U       N       P         7440-62-2       Vanadium       11.8       B       P         7440-66-6       Zinc       16.0       E       P	7440-23-5	Sodium	87.5	в		P
7440-62-2         Vanadium         11.8         B         P           7440-66-6         Zinc         16.0         E         P	7440-28-0	Thallium	0.40	σ	N	P
7440-66-6 Zinc 16.0 E P	7440-62-2	Vanadium	11.8	B		P
	7440-66-6	Zinc	16.0		E	P

Color Before:		Clarity Before:		Texture:	 
Color After:		Clarity After:		Artifacts:	 
Comments:			<u> </u>		
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#### 2A

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name:	Adirondack E	nvironmenta	1	Contract:	Black Ash	Pond		
Lab Code:	AES	Case No.:	ESE 0702	SAS No.:			SDG No.:	SD-7-SU-07-6
Initial Calibration Source: EPA-ICV								
Continuing	Calibration So	urce: EPA	-LV					

Concentration Units: ug/L

	Initial	Calibration	Continuing Calibration			
Analyte	True	Found %R(1)	True	Found %R(1)	Found %R(1)	м
Aluminum	2000.0	2186.22 109.3	2000.0	2093.21 104.7	2170.12 108.5	P
Antimony	2000.0	2018.90 100.9	2000.0	<b>1970</b> .37 <b>98.5</b>	1979.05 99.0	P
Arsenic	2000.0	2017.61 100.9	2000.0	2035.07 101.8	2024.28 101.2	P
Barium	2000.0	2069.85 103.5	2000.0	2093.96 104.7	2062.85 103.1	P
Beryllium	2000.0	2044.49 102.2	2000.0	2070.84 103.5	2055.09 102.8	P
Cadmium	2000.0	2118.80 105.9	2000.0	2115.57 105.8	2118.51 105.9	P
Calcium	2000.0	2026.54 101.3	2000.0	2009.75 100.5	2047.88 102.4	Р
Chromium	2000.0	2006.97 100.3	2000.0	1971.49 98.6	1991.35 99.6	P
Cobalt	2000.0	2053.83 102.7	2000.0	2055.35 102.8	2067.91 103.4	P
Copper	2000.0	2015.96 100.8	2000.0	2004.67 100.2	2008.34 100.4	P
Iron	2000.0	2095.66 104.8	2000.0	2142.87 107.1	2106.77 105.3	P
Mercury	2.0	1.97 98.5	2.0	1.95 97.5	1.90 95.0	cv
Lead	2000.0	2162.01 108.1	2000.0	2150.20 107.5	2187.27 109.4	P
Magnesium	2000.0	2042.14 102.1	2000.0	2036.92 101.8	2033.55 101.7	P
Manganese	2000.0	2007.16 100.4	2000.0	1998.77 99.9	2014.77 100.7	P
Nickel	2000.0	2105.51 105.3	2000.0	2114.61 105.7	2121.49 106.1	P
Potassium	10000.0	9756.45 97.6	10000.0	9864.64 98.6	9775.86 97.8	P
Selenium	2000.0	2023.98 101.2	2000.0	2040.25 102.0	2026.47 101.3	P
Silver	500.0	488.46 97.7	500.0	491.87 98.4	489.95 98.0	P
Sodium	2000.0	1826.75 91.3	2000.0	2196.54 109.B	1845.56 92.3	P
Thallium	2000.0	2150.14 107.5	2000.0	2147.20 107.4	2166.68 108.3	P
Vanadium	2000.0	2022.05 101.1	2000.0	2116.17 105.8	2020.52 101.0	P
Zinc	2000.0	2062.19 103.1	2000.0	2081.74 104.1	2062.24 103.1	P

#### **2A**

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name:	Adirondack Er	nvironz	mental			Contrac	:t: ]	Black Ash	Pond		
Lab Code:	AES	Case N	No.:	ESE	0702	SAS	No.:	<del></del>		SDG No.:	SD-7-SU-07-6
Initial Calibration Source: EPA-ICV											
Continuing	Calibration Sou	urce:	EPA-	-LV							

Concentration Units: ug/L

	Initia	al Calibratio	on	Continuing Calibration						
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found %R(1)	м		
Aluminum			1	2000.0	2174.92	108.7	2156.37 107.8	P		
Antimony				2000.0	<b>1968.</b> 36	98.4	1972.64 98.6	P		
Arsenic			]	2000.0	2082.57	104.1	2021.08 101.1	P		
Barium				2000.0	2003.28	100.2	2073.70 103.7	P		
Beryllium	L		.1	2000.0	<b>2092</b> .55	104.6	2059.58 103.0	P		
Cadmium				2000.0	2130.92	106.5	2113.00 105.6	P		
Calcium				2000.0	<b>2115</b> .56	105.8	2024.59 101.2	P		
Chronium				2000.0	<b>1988</b> .73	99.4	1991.75 99.6	P		
Cobalt				2000.0	2134.41	106.7	2057.87 102.9	P		
Copper			1	2000.0	<b>1969</b> .53	98.5	2020.47 101.0	P		
Iron				2000.0	2135.79	106.B	2097.24 104.9	P		
Mercury				2.0	1.85	92.5		CV		
Lead				2000.0	<b>2199</b> .19	110.0	2067.39 103.4	P		
Magnesium				2000.0	<b>2066.</b> 36	103.3	2027.35 101.4	P		
Manganese				2000.0	2050.46	102.5	2010.48 100.5	P		
Nickel				2000.0	<b>2190</b> .65	109.5	2110.37 105.5	P		
Potassium				10000.0	10076.35	100.8	9719.82 97.2	P		
Selenium				2000.0	2096.37	104.8	2018.38 100.9	P		
Silver				500.0	484.04	96.B	493.12 98.6	P		
Sodium			Î	2000.0	1985.00	99.2	1824.32 91.2	P		
Thallium				2000.0	2062.26	103.1	2002.70 100.1	P		
Vanadium				2000.0	2027.07	101.4	2027.73 101.4	P		
Zinc			1 1	2000.0	2094.25	104.7	2060.32 103.0	P		

#### 2A

#### INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name:	Adirondack H	Enviro	mental	L		Contrac	st: <u>P</u>	Black A	Ash Pond		
Lab Code:	AES	Case	No.:	ESE	0702	SAS	No.:	<u></u>		SDG No.:	SD-7-SU-07-6
Initial Cal	Libration Sour	ce:	EPA-IC	v						_	
Continuing	Calibration S	ource:	EPA	-LV							

Concentration Units: ug/L

	Initia	al Calibratio	n		Continuing	Calibra	ation	_	<u> </u>
Analyte	True	Found	&R(1)	True	Found	%R(1)	Found	%R(1)	м
Aluminum				2000.0	<b>2167</b> .37	108.4	2146.32	107.3	P
Antimony			1	2000.0	1 <b>963.</b> 59	98.2	1974.77	98.7	Р
Arsenic				2000.0	<b>2029.</b> 21	101.5	2003.89	100.2	P
Barium				2000.0	2071.92	103.6	2051.46	102.6	Р
Beryllium			<u> </u>	2000.0	<b>2051</b> .85	102.6	2037.37	101.9	P
Cadmium				2000.0	2130.77	106.5	2110.60	105.5	P
Calcium				2000.0	203B.19	101.9	2019.03	101.0	P
Chromium				2000.0	<b>2012</b> .09	100.6	1996.78	99.8	P
Cobalt				2000.0	2075.03	103.8	2041.86	102.1	P
Copper				2000.0	2030.61	101.5	2011.47	100.6	P
Iron				2000.0	2116.94	105.8	2082.34	104.1	Р
Lead				2000.0	2091.74	104.6	2058.90	102.9	P
Magnesium				2000.0	2047 86	102.4	2025.98	101.3	P
Manganese				2000.0	2030.97	101.5	2001.34	100.1	P
Nickel				2000.0	2123.21	106.2	2093.92	104.7	P
Potassium				10000.0	9855.22	98.6	9715.82	97.2	P
Selenium				2000.0	2035.72	101.8	1995.75	99.8	Р
Silver				500.0	<b>490.</b> 33	98.1	488.92	97.0	P
Sodium				2000.0	1847.46	92.4	1824.10	91.2	P
Thallium				2000.0	2016.30	100.8	1987.23	99.4	P
Vanadium				2000.0	2030.56	101.5	1998.75	99.9	P
Zinc				2000.0	2073.95	103.7	2042.99	102.1	P

#### 2A

#### INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name:	Adirondack En	viron	mental	L		Contract:	<u>Blac</u> )	c Ash	Pond		
Lab Code:	AES	Case	No.:	ESE	0702	SAS No.	:			SDG No.:	SD-7-SU-07-6
Initial Cal	ibration Source	a: 1	EPA-IC	v							
Continuing	Calibration Sou	irce:	EPA	-LV							

Concentration Units: ug/L

	Initi	al Calibrati	on		Continuing	Calibra	ation		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	м
Aluminum	1			2000.0	2117.47	105.9			P
Antimony	[			2000.0	<b>1986</b> .61	99.3		-	P
Arsenic				2000.0	2000.72	100.0			P
Barium				2000.0	<b>2043</b> .62	102.2			P
Beryllium				2000.0	2028.87	101.4			P
Cadmium				2000.0	<b>2105</b> .54	105.3		1	P
Calcium				2000.0	2017.08	100.9			P
Chromium	Ī			2000.0	<b>1996.</b> 30	99.8		1	P
Cobalt	1			2000.0	2043.56	102.2			P
Copper				2000.0	2010.20	100.5			P
Iron	1	[		2000.0	2079.37	104.0		]	P
Lead				2000.0	<b>2141</b> .73	107.1		1	P
Magnesium				2000.0	2019.24	101.0		1	P
Manganese	I			2000.0	2003.73	100.2		1	P
Nickel	Î.			2000.0	2091.42	104.6		1	P
Potassium	1			10000.0	9678.26	96.8	_		P
Selenium				2000.0	2002.97	100.1			P
Silver				500.0	487.67	97.5		1	P
Sodium				2000.0	1817.31	90.9			P
Thallium	1		1	2000.0	<b>1986</b> .57	99.3			P
Vanadium				2000.0	1996.16	99.8		1	P
Zinc				2000.0	2042.23	102.1		1	P

#### 2B-IN

## CRDL STANDARD FOR AA AND ICP

Lab	Name :	Adirond	ack Envir	onmental	Contract:	Black	Ash Pond		
Lab	Code:	AES	Case 1	No.: <u>ESE 0</u>	702 SAS No			SDG No.:	SD-7-SU-07-6
AA C	RDL St	tandard Sou	rce:						
ICP	CRDL S	Standard So	ource:	INOR-VEN					
					Concentration	Units:	ug/L		

					CRDL Sta	ndard f	or ICP	
				In In	itial		Fina.	l
Analyte	True	Found	%R	True	Found	%R	Found	ϞR
Antimony				120.0	96.85	80.7	105.23	87.7
Arsenic				20.0	20.45	102.2	21.56	107.8
Beryllium		]		10.0	9.71	97.1	8.71	87.1
Cadmium				10.0	9.94	99.4	8.66	86.6
Chromium				20.0	19.59	98.0	16.44	82.2
Cobalt				100.0	99.38	99.4	87.24	87.2
Copper				50.0	50.28	100.6	39.66	79.3
Lead				6.0	5.38	89.7	5.22	87.0
Manganese				30.0	29.45	98.2	24.85	82.8
Nickel				80.0	82.95	103.7	74.82	93.5
Selenium				10.0	10.23	102.3	9.07	90.7
Silver				20.0	19.91	99.6	15.19	76.0
Thallium		_		20.0	20.18	100.9	16.95	84.8
Vanadium				100.0	92.77	92.8	88.15	88.2
Zinc	1			40.0	40.78	102.0	37.03	92.6

Control Limits: no limits have been established by EPA at this time

## 3

#### BLANKS

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

	Initial Calib.	_		c	ontinuing Cal	lib;	ration		Preparation		
Appleto.	(ug/L)				Brank (ug)	(1)			Blank		
Analyte		C	1	С	2	С	3	С		С	м
Aluminum	15.1	В	17.9	В	9.2	B	8.3	В	4.670	В	P
Antimony	16.2	ד	16.2	ש	16.2	ש	16.2	U	3.240	ש	P
Arsenic	2.4	σ	2.4	שן	2.4	ן ס	2.4	ד	0.480	U	P
Barium	3.4	σ	3.4	ש	3.4	ש	3.4	σ	0.680	σ	↓ ₽
Beryllium	0.3	υ	0.3	ש	0.3	ש	0.3	σ	0.060	σ	P
Cadmium	0.5	σ	0.5	D D	0.5	ס	0.5	σ	0.100	U U	P
Calcium	6.9	υ	6.9	ס	6.9	ס	6.9	σ	1.380	σ	P
Chromium	2.7	υ	2.7	ש	2.7	ש	2.7	σ	0.540	ਹ	P
Cobalt	0.9	σ	0.9	ש	0.9	ס	0.9	σ	0.180	σ	I P
Copper	2.0	σ	2.0	υ	2.0	ש	2.0	σ	0.400	σ	P
Iron	7.3	σ	12.5	в	7.3	ש	7.3	σ	1.460	σ	P
Mercury	0.06	υ	0.06	ס	0.06	σ	0.06	σ	0.030	σ	cv
Lead	1.6	٩	1.6	σ	1.6	ש	1.6	σ	0.320	σ	P
Magnesium	9.2	σ	9.2	σ	9.2	σ	9.2	υ	1.840	σ	P
Manganese	0.3	σ	0.3	ש	0.3	ש	0.3	σ	0.060	σ	P
Nickel	0.9	ΰ	0.9	σ	0.9	σ	0.9	σ	0.180	σ	P
Potassium	3.2	σ	3.2	ש	3.2	υ	3.2	υ	0.640	σ	P
Selenium	2.4	σ	2.4	ש	2.4	σ	2.4	σ	0.480	σ	P
Silver	1.8	σ	1.8	סן	1.8	ד	1.8	σ	0.360	σ	P
Sodium	8.6	σ	8.6	ש	8.6	υ	8.6	σ	1.720	σ	P
Thallium	1.6	σ	1.6	σ	1.6	ס	1.6	σ	0.320		P
Vanadium	4.2	σ	4.2	סן	4.2	ש	4.2	υ	0_840	σ	
Zinc	0.7	σ	0.7	ש	0.7	ס	0.7	σ	0.140	σ	P

## 3

#### BLANKS

 Lab Name:
 Adirondack Environmental
 Contract:
 Black Ash Pond

 Lab Code:
 AES
 Case No.:
 ESE 0702
 SAS No.:
 SDG No.:
 SD-7-SU-07-6

 Preparation Blank Matrix (soil/water):
 SOIL
 SOIL
 Preparation Blank Concentration Units (ug/L or mg/kg):
 MG/KG

	Initial Calib. Blank			Co	Dutinuing Cal Blank (ug,	Lib: /L)	cation		Preparation Blank		
Analyte	(1971)	C	1	С	2	С	З	С	ſ	С	M
Aluminum			29.8	B	7.8	B	9.7	В	<u> </u>	1	P
Antimony			16.2	ש	16.2	ש	16.2	<del>U</del>		1	P
Arsenic		Í	2.4	ש	2.4	ש	2.4	σ		<u></u>	P
Barium			3.4	σ	3.4	णि	3.4	υ		1	P
Beryllium			0.3	σ	0.3	ש	0.3	σ		<u> </u>	
Cadmium			0.5	ש	0.5	ש	0.5	σ	<u> </u>	<u> </u>	P
Calcium			6.9	ס	6.9	ש	6.9	υ		L	P
Chromium			2.7	σ	2.7	ס	2.7	σ		1	P
Cobalt			0.9	σ	0.9	ש	0.9	υ	<u> </u>	L	P
Copper			2.0	σ	2.0	ש	2.0	σ		L	P
Iron			7.3	σ	7.3	ס	7.3	ד			P
Lead			1.6	סן	1.6	ש	1.6	σ		( 	P
Magnesium			9.2	ש	9.2	ש	9.2	υ		I	P
Manganese	1		0.3	υ	0.3	σ	0.3	σ			P
Nickel			0.9	σÌ	0.9	σ	0.9	σ		1	P
Potassium			3.2	ד	3.2	σ	3.2	σ		<u> </u>	P
Selenium			2.4	סן	2.4	σ	2.4	σ			
Silver			1.8	סן	1.8	σ	1.8	σ		<u> </u>	
Sodium		ĪĪ	8.9	в	25.7	в	24.2	В			P
Thallium		TÍ	1.6	סן	1.6	ד	1.6	σ	<u></u>		P
Vanadium		TT	4.2	שן	4.2	ד	4.2	σ			P
Zinc		11	0.7	דו	0.7	σ	0.7	υ			P

## 3

#### BLANKS

Lab Name: Adirondack Environmental Contract: Black Ash Pond Lab Code: AES Case No.: ESE 0702 SAS No.: SDG No.: SD-7-SU-07-6 Preparation Blank Matrix (soil/water): SOIL Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	_		Co	ntinuing ( Blank (1	Calibrat 1g/L)	ion		Preparation Blank		
		С	±	<u>с</u>	2	C	3	C	<u>  </u>	С	м
Aluminum		!	13.7	В							P
Antimony			16.2	ש							P
Arsenic			2.4	ש							P
Barium			3.4	ש					1		P
Beryllium			0.3	ש					i		P
Cadmium			0.5	ע		- i					P
Calcium			6.9	ש							P
Chromium			2.7	ש							P
Cobalt		ÍÍ	0.9	ש						<u> </u>	P
Copper			2.0	ד		1 1			<u> </u>		P
Iron			7.3	ש				İ		-	P
Lead			1.6	σ					<u> </u>		P
Magnesium			9.2	ד		<u> </u>		Ì	<u> </u>	-	P
Manganese			0.3	דו					<u> </u>	! 	P
Nickel			0.9	ד			-	-	<u> </u>		Р
Potassium			3.2	ד					<u></u>	¦	P
Selenium			2.4	ש		1		T	<u>;1_</u>		P
Silver			1.8	ד						!	P
Sodium			8.6	וס		11					P
Thallium			1.6	דן					<u> </u>		P
Vanadium			4.2	ד					<u> </u>		P
Zinc			0.7	σ					<u>_</u>		P

#### 4

#### **ICP INTERFERENCE CHECK SAMPLE**

\_\_\_\_\_

Lab Name: Adirondack Environmental Contract: Black Ash Pond

\_\_\_\_\_

Lab Code: <u>AES</u> Case No.: <u>ESE 0702</u> SAS No.: \_\_\_\_\_\_ SDG No.: <u>SD-7-SU-07-6</u>

ICP ID Number: ICP4

ICS Source: EPA Concentration Units: ug/L

	Tru	10	Ini	tial Found		Final Found			
Analyte	Sol.A	Sol.AB	Sol.A	Sol.AB	+R	Sol.A	Sol.AB	ŧR	
Aluminum	500000	500000	449534	440814.1	88.2	376428	419163.6	83.8	
Barium		500		477.2	95.4		490.6	98.1	
Beryllium		500		449.8	90.0		460.2	92.0	
Cadmium		1000		967.1	96.7		989.9	99.0	
Calcium	500000	500000	348792	348886.8	69.8	341746	351115.3	70.2	
Chromium		500		458.2	91.6	· · · · · · · · · · · · · · · · · · ·	471.4	94.3	
Cobalt		500		418.8	83.0		412.7	82.5	
Copper		500		420.7	84.1		437.1	87.4	
Iron	200000	200000	117784	117885.4	58.9	111164	119560.1	59.8	
Lead		1000		1001.8	100.2		1024.6	102.5	
Magnesium	500000	500000	425193	419570.3	83.9	396985	433702.1	B6.7	
Manganese		500		477.1	95.4		491.6	98.3	
Nickel		1000		806.1	80.6		829.7	83.0	
Silver		1000		906.3	90.6		929.8	93.0	
Vanadium		500		439.0	87.8	Ì	459.3	91.9	
Zinc		1000		916.4	91.6		947.1	94.7	
#### 5A

#### SPIKE SAMPLE RECOVERY

							SAM	PLE NO.		
							WM-4-	SU-07-8MS		_
Lab N	ame: Adirond	lack Envir	onmental	Cor	stract: <u>Black As</u> h	ı P	ond			
Lab C	ode: <u>AES</u>	Case N	o.:		SDG No.: SI	-7-SU-07	-6			
Matri	<b>x (soil/water</b>	): <u>SOIL</u>	Le	eve]	(low/med): LOW					
& Sol	ids for Sample	e: <u>79.9</u>	<u>-</u>				<del>,</del>			
		Con	centration Units (ug	/L	or mg/kg dry weight	<b>:)</b> :		·		
	Analyte	Control Limit %R	Spiked Sample Result (SSR)	с	Sample Result (SR)	с	Spike Added (SA)	÷R	<b> </b> _	м
	Aluminum		5233.2090	1	3501.9880		500,63	345.8	1 -	P
	Antimony	75 - 125	95.2709		4.0551	υ	125.16	76.1	1	
	Arsenic	75 - 125	22.3128		B.3660	-	10.01	139.3	N	P
	Barium	75 - 125	573.9628		50.6962		500.63	104.5	-	P
	Beryllium	75 - 125	13.0807		0.5753	в	12.52	106.3		P
	Cadmium	75 - 125	12.4917		0.1841	в	12.52	98.3	1	P
	Calcium		1997.1420		2333.8010		0.00	0.0		P
	Chromium	75 - 125	57.8313		5.8590		50.06	103.8	i –	P
	Cobalt	75 - 125	128.5332		3.3682	в	125.16	100.0		P
	Copper	75 - 125	85.7023		16.8132		62.58	110.1		P
	Iron		5572.2510		4364.2840		250.31	482.6	Í	P
	Mercury	75 - 125	1.5394		0.3066		1.25	98.6		cv
	Lead	75 - 125	22.7060		18.2054		5.01	89.8		P
	Magnesium		358.5711	в	395.4205	в	D.00	0.0		P
	Manganese	75 - 125	206.0908		87.8974		125.16	94.4		P
	Nickel	75 - 125	139.1907		8.3549	в	125.16	104.5		P
	Potassium		285.7538	в	222.1849	в	0.00	0.0		P
	Selenium	75 - 125	5.1258		2.0348		2.50	123.6		P
	Silver	75 - 125	10.1764		0.4506	υ	12.52	81.3		P
	Sodium		110.6404	в	87.5442	в	0.00	0.0		P
	Thallium	75 - 125	9.1551	Ì	0.4005	σ	12.52	73.1	N	Р
	Vanadium	75 - 125	145.9158		11.7733	в	125.16	107.2		P
	Zinc	75 - 125	144.8144		15.9789	1	125.16	102.9		P

#### Comments:

#### 5**A**

#### SPIKE SAMPLE RECOVERY

0.0392 U

1.31

100.6

CV

							_		SAN	MPLE NO.		
									SD-11-	-SU-07-18M	s	
Lab Na	me: <u>Adirond</u>	lack Envir	onmental	Cor	tract:	Black As	h P	ond				
Lab Co	ode: <u>AES</u>	Case M	Io.: <u>ESE 0</u>	0702 SAS N	».:			SDG No.	: <u>s</u>	D-7-SU-07	-6	
Matrix	(soil/water	): <u>SOIL</u>		Level	(low/me	d): LOV	Ŧ					
€ Soli	ds for Sample	a: <u>76.6</u>										
		Con	centration	Units (ug/L	or mg/kg	dry weigh	t):	-	MG/K	G		
	Analyte	Control Limit %R	Spiked Sau Result (S	mple SR) C	Sam Result	ole : (SR)	С	Spike Added	(SA)	۶R	Q	м

1.3185

Comments:

Mercury

75 - 125

#### 5B

#### POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

WM-4-SU-07-8A

Auro	noack Envi	ronmental	_	Contract: Black	Ash	Pond			
Code: <u>AES</u>	Case	No.: ESE 0702	SZ	AS No.:		SDG No.: SD-	-7-SU-07	-6	
rix (soil/water	:): SOII	G		Level (low)	med	I): LOW			
		Concen	trat	tion Units: ug/L			•		
Analyte	Control	Spiked Sample	~	Sample	_	Spike			
	Limit %R	Result (SSR)		Result (SR)	с	Added (SA)	+R	Q	M
Aluminum		4469.34		3501.99		1001.3	96.6		Р
Antimony		250.17		4.06	υ	250.3	99.9		Р
Arsenic		28.40		8.37		20.0	100.2		P
Barium		1044.94		50.70		1001.3	99.3		P
Beryllium		26.88		0.58	в	25.0	105.2		Р
Cadmium		25.94		0.18	в	25.0	103.0		P
Calcium		2292.31		2333.80		0.0	0.0		P
Chromium		110.20		5.86		100.1	104.2		P
Cobalt		266.13		3.37	в	250.3	105.0		P
Copper		150.87		16.81		125.2	107.1		P
Iron		4646.69		4364.28		500.6	56.4		P
Lead		28.35		18.21		10.0	101.4		P
Magnesium		385.48	в	395.42	B	0.0	0.0		P
Manganese		344.44		87.90		250.3	102.5		P
Nickel		281.57		8.35	в	250.3	109.2		P
Potassium		223.94	B	222.18	в	0.0	0.0		P
Selenium		7.47		2.03		5.0	108.B	Ì	P
Silver		22.64		0.45	υ	25.0	90.6		P
Sodium		87.97	в	87.54	в	0.0	0.0		P
Thallium		22.52		0.40	ס	25.0	90.1		P
Vanadium		271.39		11.77	в	250.3	103.7		P
Zinc		280.56		15.98		250.3	105.7		P

lomments:

#### 6

# DUPLICATES

					·	SAI	MPLE NO	0.		
						WM-4	-SU-07	-8DP		
Lab Name:	Adirondack Env	ironmental	Contract:	Bla	ack Ash Pond					
Lab Code:	AES Cas	se No.: <u>ESE 0702</u>	SAS 1	No.:	SDG	No.:	SD-7-	-SV-0	)7-6	
Matrix (soil	/water): <u>SOII</u>		Level (	low/1	ned): LOW					
% Solids for	Sample: 79	.9	Solids fo	r Duj	plicate: <u>79</u> .9					
	Concer	ntration Units (u	JL or mg/k	a dr	v weight).	MG/KI				
	Contro	1							n	
Analyte	Limit	Sample (	5)	с	Duplicate (D)		C RI	PD	0	м
Aluminum			3501.9880	Ī	3564.0	130		1.8	- <i>-</i>	P
Antimony			4.0551	σ	4.0	551 T	J		1	P
Arsenic	2.5		8.3660		7.7	199		8.0	1	P
Bariun	50.1		50.6962		51.2	038		1.0	1	P
Berylliu	<u>a</u>		0.5753	В	0.5	724 I	3	0.5	1	P
Cadmium			0.1841	в	0.2	055 I	3 1	1.0	1	P
Calcium	1251.	6	2333.0010		2343.4	340		0.4		P
Chromium	2.5		5.8590		5.4	043		8.1	<u> </u>	P
Cobalt			3.3682	В	3.1	365 E	3	5.5		P
Copper	6.3		16.8132		17.1	397		1.9		P
Iron			4364.2840		4282.2	760		1.9		P
Mercury	0.1		0.3066		0.4	L30	2	9.6		cv
Lead			18.2054		17.2	588		5.3		P
Magnesiu	<u>а</u>		395.4205	в	397.70	)73 B		0.6		P
Manganese	2		87.8974		83.1	527		5.5		P
Nickel			8.3549	в	7.9	350 B		5.2		P
Potassium	n		222.1849	в	224.72	243 B		1.1		P
Selenium	1.3		2.0348		1.53	317	21	8.2		P
Silver			0.4506	σ	0.45	06 U				P
Sodium			87.5442	в	87.68	92 B		0.2		P
Thallium			0.4005	υ	0.67	55 B	200	0.0		P
Vanadium			11.7733	в	11.77	38 B		0.0		P
Zinc	5.0		15.9789		15.10	19	1 5	5.6		P

# 6

# DUPLICATES

								SAMPL	ENO.		
								SD-11-SU	7-07-18D	 P	
Lab Name:	Adirondack	Environmer	ital	Contract:	Blad	ck Ash Pond	1				· •
Lab Code: .	AES	Case No.:	ESE 0702	SAS N	0.:		SDG	No.: SI		 07-6	
Matrix (soil	/water):	SOIL		Level ()	.ow/m	ed): <u>I(</u>	W	~			
% Solids for	Sample:	<u>. 76.6</u>	号	Solids for	Dup	licate:	76.6				
·	C	oncentration	Units (ug/	/L or mg/kg	ı dry	weight):	1	MG/KG	-		
Analyte	Co	ontrol .imit	Sample (S)		с	Duplicate	(D)				
Mercury				0.0392	υ		0.0	392 U	KPD	Q	M CV

#### 7

#### LABORATORY CONTROL SAMPLE

Lab Name: Adirondack Environmental \_\_\_\_\_ Contract: Black Ash Pond Lab Code: AES \_\_\_\_\_ Case No.: ESE 0702 SAS No.: \_\_\_\_\_ SDG No.: SD-7-SU-07-6

Solid LCS Source: EPA-ICV

Aqueous LCS Source:

	Aqueous	(ug/L)			Solid	(mg/kg)	-	
Analyte	True	Found	åR	True	Found (	Lim:	its	ŧR
Aluminum	1			8260.0	5110.00	4320.0	12200.0	61.9
Antimony				90.2	30.40	0.0	153.0	33.7
Arsenic				132.0	116.00	196.0	314.0	87.9
Barium				319.0	297.00	370.0	568.0	93.1
Beryllium				89.5	83.10	66.8	106.0	92.8
Cadmium	1			66.5	62.90	94.7	143.0	94.6
Calcium				3920.0	4300.00	2980.0	4540.0	109.7
Chromium				72.9	57.80	55.7	86.7	79.3
Cobalt				73.1	65.30	64.0	95.2	89.3
Copper				68.5	58.10	77.6	115.0	84.8
Iron				13400.0	7760.00	6590.0	19900.0	57.9
Mercury				8.3	8.8	7.8	16.9	106.3
Lead				130.0	117.00	133.0	205.0	90.0
Magnesium	1			2610.0	2210.00	2230.0	3750.0	84.7
Manganese				453.0	381.00	181.0	436.0	84.1
Nickel				55.6	49.30	82.0	120.0	88.7
Potassium				3460.0	2810.00	1670.0	3170.0	81.2
Selenium				161.0	143.00	129.0	213.0	88.8
Silver	[			101.0	67.70	66.9	135.0	67.0
Sodium				588.0	721.00 B	418.0	732.0	122.6
Thallium				133.0	113.00	155.0	251.0	85.0
Vanadium	1			83.0	75.60	101.0	166.0	91.1
Zinc	1			177.0	155.00	159.0	244.0	87.6

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# STANDARD ADDITION RESULTS

 Contract:
 Black Ash Pond

 Lab Code:
 AES
 Case No.:
 ESE 0702
 SAS No.:
 SDG NO.:
 SD-7-SU-07-6

(Concentration Units):

ug/L

Sample ID.	Ап	0 ADD ABS	1 CON	ADD	2 CON	ADD	3	ADD	Final Conc.	r	
											<u>v</u>

#### 9 **ICP SERIAL DILUTIONS**

CAMOTE	NO
SAMPLE	NU.

WM-4-SU-07-8L

Lab Name: Adirondack Environmental Contract: Black Ash P

Lab Code: AES Case No.: ESE 0702 SAS No.: \_\_\_\_\_ SDG No.: <u>SD-7-SU-07-6</u> Matrix (soil/water): SOIL

Level (low/med): LOW

Concentration Units: ug/L

	Initial Sample Result (I)		Serial Dilution Result (S)		% Differ- ence		
Analyte		С		с		Q	м
Aluminum	13990.44		15473.84	Ī	10.6	E	P
Antimony	3.70	B	173.81	В	4597.6	<u> </u>	P
Arsenic	33.42		48.33	в	44.6		P
Barium	202.53		215.65	в	6.5		P
Beryllium	2.30		2.43	В	5.7		P
Boron	7.40	ש	37.00	U		i —	P
Cadmium	0.74	В	2.50	U	100.0		P
Calcium	9323.54		10298.19	в	10.5	E	P
Chromium	23.41		16.57	В	29.2	i	P
Cobalt	13.46		16.41	в	21.9		P
Copper	67.17		78.72	в	17.2	<u> </u>	P
Iron	17435.31		20784.07		19.2	E	P
Lead	72.73		68.56		5.7		P
Magnesium	1579.70		1788.60	в	13.2	E	P
Manganese	351.15		395.46		12.6	E	P
Nickel	33.38		39.40	в	18.0		P
Potassium	687.63	B	827.98	в	6.7		P
Selenium	8.13		12.67	в	55.8		P
Silver	1.80	σ	9.00	υ			P
Sodium	349.74	в	302.43	в	13.5		P
Thallium	1.50	B	8.07	в	438.0		P
Vanadium	47.03		69.97	в	48.8		P
Zinc	63.84	İ	73.99	в	15.9	E	P

#### 10

# **INSTRUMENT DETECTION LIMITS (QUARTERLY)**

Lab Name: Adirondack Environmental	Contract: Black Ash Pond
Lab Code: <u>AES</u> Case No.: <u>ESE 0702</u>	SAS No.: SDG No.: SD-7-SU-07-6
ICP ID Number:	Date: 2/6/2007
Flame AA ID Number: <u>CVAA</u>	
Furnace AA ID Number:	
Wave-	Back-

Analyte	Wave- length (nm)	Back- ground	CRDL (ug/L)	IDL (ug/L)	м
Mercury	253.70		0.20	0.06	CV

Comments:

#### 10

# INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab	Name:	Adirondack Environmental	Contract: Black Ash Pond
Lab	Code:	AES Case No.: ESE 0702	SAS No.: SDG No.: SD-7-SU-07-6
ICP	ID Numb	er: <u>ICP4</u>	Date: 2/6/2007
Flar	ne AA ID	Number:	

\_\_\_\_

Furnace AA ID Number:

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Analyte	Wave- length (nm)	Back- ground	CRDL (ug/L)	IDL (ug/L)	м
Aluminum	308.22		200	5.2	P
Antimony	206.83		60	16.2	P
Arsenic	189.04		10	2.4	Р
Barium	493.41		200	3.4	P
Beryllium	313.04		5	0.3	P
Boron	249.68		50	7.4	Р
Cadmium	226.50		5	0.5	P
Calcium	317.93		5000	6.9	Р
Chromium	267.72		10	2.7	Р
Cobalt	228.62		50	0.9	P
Copper	324.75		25	2.0	P
Iron	271.44		100	7.3	P
Lead	220.35		3	1.6	P
Magnesium	279.08		5000	9.2	P
Manganese	257.61		15	0.3	P
Nickel	231.60		40	0.9	P
Potassium	766.49		5000	3.2	Р
Selenium	196.02		5	2.4	P
Silver	328.07		10	1.8	P
Sodium	588.9		5000	8.6	P
Thallium	190.86	ĺ	10	1.6	P
Vanadium	292.40		50	4.2	P
Zinc	206.2		20	0.7	P

Comments:

#### 11A ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name:	Adirondack Envir	<u>conmental</u>		Contract:	Black Ash	Pond	
Lab Code:	AES	Case No.:	ESE 0702	SAS No.:		SDG No.:	SD-7-SU-07
ICP ID Nur	ber: <u>ICP4</u>			Date: <u>4</u>	/5/2007		

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	length		Interelement	Correction F	actors for:	
Analyte	(nm)	Al	Ca	Fe	Mg	Rh
Aluminum	308.20	0.0000000	0.000000	0.0000000	0.000000	
Antimony	206.80	0.000000	0.000000	0.000000	0.000000	
Arsenic	193.70	0.0001270	0.000000	0.000000	0.000000	
Barium	493.40	0.000000	0.000000	0.0000000	0.0000000	
Beryllium	313.00	0.000000	0.000000	0.000000	0.0000000	
Cadmium	228.80	0.0000000	0.000000	0.000000	0.000000	
Calcium	317.90	0.000000	0.000000	0.000000	0.0000000	
Chromium	357.80	0.0000000	0.000000	0.0001400	0.000000	
Cobalt	228.60	0.0000000	0.000000	0.000000	0.0000000	
Copper	324.70	0.0000000	0.000000	0.000000	0.000000	·····
Iron	259.90	0.0001900	0.000000	0.0000000	0.0000000	•
Lead	220.30	0.0001020	0.0000000	0.0008420	0.0000000	
Magnesium	383,80	0.0000000	0.000000	0.000000	0.0000000	•
Manganese	257.61	0.0000000	0.000000	0.000000	0.0000000	
Nickel	231.60	0.0000000	0.000000	0.000000	0.0000000	
Potassium	766.49	0.000000	0.0000000	0.000000	0.000000	
Selenium	196.00	0.0000000	0.000000	0.000000	0.0000000	• • •
Silver	328.00	0.000000	0.0000000	0.000000	0.0000000	
Sodium	588.90	0.000000	0.000000	0.000000	0.0000000	
Thallium	190.80	0.0000000	0.0008600	0.000000	0.0000000	
Tin	189.90	0.0000000	0.000000	0.0000000	0.0000000	
Vanadium	292.40	0.0006000	0.000000	0.000000	0.0000000	
Zinc	213.80	0.000000	0.000000	0.0001040	0.0000000	· · · · · · · · · · · · · · · · · · ·

Comments:

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# **ICP LINEAR RANGES (QUARTERLY)**

Lab Name: Adirondack Er	nvironmental	Cont	ract: <u>Black Ash Po</u>	ond
Lab Code: <u>AES</u>	Case No.: ES	SE 0702 SAS	No.:	SDG No.: SD-7-SU-07-6
ICP ID Number: ICP4		Dat	e: <u>2/10/2007</u>	_
	Analyte	Integ. Time (Sec.)	Concentration (ug/L)	м
	Aluminum	60.00	250000.0	P
	Antimony	60.00	50000.0	P
	Arsenic	60.00	100000.0	P
	Barium	60.00	10000.0	P
	Beryllium	60.00	10000.0	P
	Boron	60.00	50000.0	P
	Cadmium	60.00	10000.0	P
	Calcium	60.00	200000.0	P
	Chromium	60.00	10000.0	P
	Cobalt	60.00	50000.0	P
	Copper	60.00	100000.0	P
	Iron	60.00	80000.0	P
	Lead	60.00	200000.0	P
	Magnesium	60.00	50000.0	P
	Manganese	60.00	10000.0	P
	Nickel	60.00	200000.0	P
	Potassium	60.00	100000.0	P
	Selenium	60.00	10000.0	P
	Silver	60.00	50000.0	P
	Sodium	60.00	50000.0	P
	Thallium	60.00	100000.0	P
	Vanadium	60.00	50000.0	P
	Zinc	60.00	10000.0	P

Comments:

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#### **PREPARATION LOG**

Lab Name:	Adirondack	Environmental	Contract:	Black Ash Pond	
Lab Code:	AES	Case No.: <u>ESE 0702</u>	SAS No.:	SDG No.:	<u>SD-7-SU-07-6</u>

Method: P\_\_\_\_

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
LCS-S,IS	6/29/2007	1.00	200.0
MBLK, IS	6/29/2007	1.00	200.0
SD-10-SU-07-18	6/29/2007	1.00	200.0
SD-10-SU-07-6	6/29/2007	1.00	200.0
SD-11-SU-07-18	6/29/2007	1.00	200.0
SD-11-SU-07-6	6/29/2007	1.00	200.0
SD-7-SU-07-18	6/29/2007	1.00	200.0
SD-7-SU-07-6	6/29/2007	1.00	200.0
SD-8-SU-07-18	6/29/2007	1.00	200.0
SD-8-SU-07-6	6/29/2007	1.00	200.0
SD-9-SU-07-18	6/29/2007	1.00	200.0
SD-9-SU-07-6	6/29/2007	1.00	200.0
WM-1-SU-07-10	6/29/2007	1.00	200.0
WM-2-SU-07-6	6/29/2007	1.00	200.0
WM-3-SU-07-9	6/29/2007	1.00	200.0
WM-4-SU-07-B	6/29/2007	1.00	200.0
WM-4-SU-07-BDP	6/29/2007	1.00	200.0
WM-4-SU-07-8MS	6/29/2007	1.00	200.0

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### **PREPARATION LOG**

Lab Name:	Adirondack	Environmental	Contract:	Black Ash Pond	
7 -1 - <b>0</b> - 1	220	0 X 777 6700			
Lab Code:	AUS	Case No.: ESE 0702	SAS No.:	SDG No	.: <u>SD-7-SU-07-6</u>

Method: <u>CV</u>\_\_\_\_\_

EPA Sample No.	Preparation Date	Initial Weight (g)	Volume (mL)
LCSS	6/29/2007	0.20	100.0
PB	6/29/2007	0.20	100.0
SD-10-SU-07-18	6/29/2007	0.20	100.0
SD-10-SU-07-6	6/29/2007	0.20	100.0
SD-11-SU-07-18	6/29/2007	0.20	100.0
SD-11-SU-07-18DP	6/29/2007	0.20	100.0
SD-11-SU-07-18MS	6/29/2007	0.20	100.0
SD-11-SU-07-6	6/29/2007	0.20	100.0
SD-7-SU-07-18	6/29/2007	0.20	100.0
SD-7-SU-07-6	6/29/2007	0.20	100.0
SD-8-SU-07-18	6/29/2007	0.20	100.0
SD-8-SU-07-6	6/29/2007	0.20	100.0
SD-9-SU-07-18	6/29/2007	0.20	100.0
SD-9-SU-07-6	6/29/2007	0.20	100.0
WM-1-SU-07-10	6/29/2007	0.20	100.0
WM-2-SU-07-6	6/29/2007	0.20	100.0
WM-3-SU-07-9	6/29/2007	0.20	100.0
WM-4-SU-07-8	6/29/2007	0.20	100.0
WM-4-SU-07-8DP	6/29/2007	0.20	100.0
WM-4-SU-07-8MS	6/29/2007	0.20	100.0

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#### ANALYSIS RUN LOG

Lab Name: Adirondack Environmental								Contract: Black Ash Pond								_												
Lab Code: <u>AES</u>		Case	No.:	ES	E	070	<u>)</u> 2	. 5	ias	N	<b>.</b> :						S	DG	Nc	.:	5	<u>3D-</u>	7-	SU	-01	1-6		_
Instrument ID Number:	ICP4							h	<b>í</b> et	ho	1:	_	Р			_												
Start Date: <u>7/18/20</u>	07							E	Ind	Da	ate	:	7/	10	/2(	07			_									
EPA				1									;	Ana	ly	es											-1	
Sample No.	D/F	Time	₿ R.	A L	S B	A S	B A	B E	C D	C A	C R	с 0	C T	f E	P B	M G	M N	H G	N I	K	SE	A G	N A	T L	v	Z N	C N	
Blank	1.00	1037		x	x	x	x	x	x	x	x	x	x	x	x	x	x	Ť	x	x	x	x	X	х	x	x	$\rightarrow$	*
200.7-1	1.00	1041		x			İ			x	i			Ī		x	T	1	x	X			x			x	ヿ	
200.7-2	1.00	1045				Í	x	x			Ì	x	x	x			x		1								ヿ	•
200.7-3	1.00	1049		Î		1		i	x	Ì	Ì				x	1	T	1		Î				X			-	*
200.7-4	1.00	1101			x				Î	Î				Ĩ			T	1	1								1	•
1 PPM AG	1.00	1110								1	1					Ť	Ť		1			x	$\square$			-	Ť	•
200.7	1.00	1114		1		х				1	x						T	1	1	1	x				x	T	1	•
ICV-1	1.00	1139		X	x	х	X	x	X	x	X	x	x	x	x	K	x	T	xİ	X	x	x	x	x	x	x		•
ICB-1	1.00	1140		X	x	х	x	x	x	x	х	x	x	x	x	ĸ	x	1	x	X	x	x	x	X	x	x	$\neg$	•
CRI-1	1.00	1145			x	x		X	X		х	x	x	Ĩ	x		x		x	Ĩ	x	x		X	x	x	Ť	
ICSA-1	1.00	1150		X						X				x		K	Î	Î		Î						Ť	1	
ICSAB-1	1.00	1202		X			x	x	x	x	X	x	x	x	x	K	хÌ	Ì	xİ	T	Π	x			x	x	Ť	
CCV-1	1.00	1207		x	x	х	X	х	X	x	x	x	x	x	x	K	x		x	x	x	x	X	X	x	x	T	
CCB-1	1.00	1211		X	x	x	X	X	X	x	x	x	x	x	xþ	K	x	Ì	x İ	X	x	x	x	X	x	x	Ť	
CCV-2	1.00	1403		X	X	x	х	x	X	x	X	x	x	x	xþ	K	x	Ĩ	x	X	x	x	x	x	x	x	Ť	
CCB-2	1.00	1405		x	X	x	x	х	X	x	X	x	x	x	xþ	K	X	T	x	x	x	x	x	x	x	x	T	
CCV-3	1.00	1512		X	X	x	X	X	X	X	X	x	x	x	x	<	x		x	x	x	x	x	X	x	x	Ť	
CCB-3	1.00	1515		x	x	x	x	x	X	x	X	x	x	x	хþ	ζ.	x		x	X	x	x	x	x	x	x	Ť	
CCV-4	1.00	1600		X	Х	X	X	х	X	x	Х	x	x	x	xþ	۲ [	X		x	x	x	x	x	x	x	x		
CCB-4	1.00	1606		x	х	X	x	х	X	x	x	x	x	x	хþ	<b>c</b> ] :	x		x	x	x	x	x	x	x	x	Ť	
MBLK, IS	1.00	1613		x	X	x	X	Х	X	X	х	x	x	x	xþ	<b>C</b>	x		x	x	x	x	x	X	x	x	T	
LCS-S,IS	1.00	1627		x	х	x	X	х	X	X	х	x	x	x	хþ	۲ ]	x	:	x	X	x	x	x	x	x	x	Ť	
SD-7-SU-07-6	1.00	1631		X	Х	x	х	x	X	x	х	x	x	x	хþ	ζ [	x	1:	x	x	x	x	x	x	x	x	Ť	
SD-7-SU-07-18	1.00	1636		x	X	<b>X</b>	X	х	X	x	x	x	x	x	хþ	<b>x</b> :	x		x	x	x	x	x	X	x	x	Ť	
SD-8-SU-07-6	1.00	1640		X	х	x	X	х	X	x	X	x	x	x	хþ	ζ.	x		x	X	X	x	x	x	x	x	Ť	
SD-8-SU-07-18	1.00	1644		x	х	x	x	x	X	x	x	x	x	x	хþ	<b>c</b>   :	x		x	x	X	x	x	x	x	x	Ť	
SD-9-SU-07-6	1.00	1651		X	X	x	х	x	X	x	Х	x	x	x	хþ	<b>z  </b> :	x		x	x	x	x	x	X	x	X	Ť	
SD-9-SU-07-18	1.00	1658		x	х	x	x	x	X	x	x	x	x	x	хþ	<b>K</b>   :	x	12	x	x	x	x	x	x	x	x	T	
SD-10-SU-07-6	1.00	1702		X	х	x	X	x	X	X	x	x	x	x	хþ	C   1	ĸ		x	x	x	x	x	X	x	x	Ť	
SD-10-SU-07-18	1.00	1710		X	x	x	x	x	X	X	X	x	x	x 🗄	хþ		ĸ	1:	X	x	x	x	x	X	x	x	Ť	
CCV-5	1.00	1714		X	X	x	x	x	X	x	X	x	x	x	хþ		K		X I	X	x	x	xÌ	x	x	x	Ť	
CCB-5	1.00	1723		X	x	хI	x	x	X	x	x	x	x.	x	хþ	: 1	ĸ		X I	x	x	xÎ	xÌ	x	x	x	Ť	
SD-11-SU-07-6	1.00	1726		x	X	x	x	x	X	x	X	x	x	x	хþ		ĸ		x i	xİ.	x	xÌ	xİ	x	x	x	Ť	
SD-11-SU-07-18	1.00	1730		x	x	x	x	x	X	X	X	x	<b>x</b> ]:	x	хþ		<		K I	x]	x	x	xÌ	x	x	x	Ť	
WM-1-SU-07-10	1.00	1736		x	x	X	X	X	X	x	X	x	x.	X	хþ		<		K I	x	X	x	x	x	x	x	Ť	
WM-2-SU-07-6	1.00	1740		x	x	x	X	X	X	x	X	x	x]	x	хþ		۲	2	<b>x</b>   1	x]	X	x	x	x	x	x	Ť	
WM-3-SU-07-9	1.00	1745		X	x	x	x	x	X	X	X	x	x :	x	хþ		۲	2	<b>K</b> [ ]	x]	X	x	x	x	x	x	Ť	
WM-4-SU-07-8	1.00	1750		x	x	x	x	x	x	x	X	x	x]	x :	xþ		4		<b>c</b> [ ]	x]	x	x	x	x	x	x	Ì	

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# ANALYSIS RUN LOG

Lab Name: Adirondack Environme	ntal	Contract:	Black Ash	Pond
Lab Code: <u>AES</u>	Case No.: <u>ESE 0702</u>	SAS No.:	·	SDG No.: SD-7-SU-07-6
Instrument ID Number: <u>ICP4</u>		Method:	P	
Start Date: <u>7/18/2007</u>		End Date:	7/18/2007	

TT.

EPA				_										Ana	aly	te	9										
No.	D/F	liws	*R	A L	S B	A S	B A	B E	C D	C A	C R	С 0	С U	F E	P B	M G	M N	H G	N I	ĸ	S E	A G	N A	T L	v	Z N	C N
WM-4-SU-07-8DP	1.00	1754		X	x	x	x	x	x	x	x	x	x	x	x	x	х		x	x	x	x	x	x	x	x	$\vdash$
WM-4-SU-07-8MS	1.00	1758		x	X	x	x	x	x	x	x	x	x	x	x	х	x		X	x	x	X	X	x	x	x	
WM-4-SU-07-BA	1.00	1802		x	X	x	x	х	x	x	x	x	x	x	x	x	x		х	X	x	x	x	x	x	x	
WM-4-SU-07-8L	5.00	1806		X	x	x	x	x	x	x	x	x	x	x	x	x	х		х	x	x	x	х	x	x	x	
CCV-6	1.00	1810		x	х	x	x	х	x	x	x	x	x	x	X	x	x		x	x	x	x	x	x	x	x	
CCB-6	1.00	1814		x	х	x	x	х	x	x	x	x	x	x	x	X	X		x	X	x	x	x	x	x	x	
CRI-2	1.00	1818			х	х		х	x	1	x	x	x		x		x		X		х	x		x	x	x	$\square$
ICSA-2	1.00	1822		х			Ì			x		Î		x		x											
ICSAB-2	1.00	1826		x			X	х	x	x	x	x	x	x	x	x	x		X			x		-	x	x	
CCV-7	1.00	1830		х	х	х	x	х	x	x	х	x	x	x	X	х	X		x	X	х	x	x	x	x	x	
CCB-7	1.00	1833		х	х	х	X	х	х	x	X	x	x	x	х	x	X		x	X	x	X	x	x	x	x	

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### ANALYSIS RUN LOG

Lab Name: Adirondack Environmental	Contract: Black Ash Pond
Lab Code: <u>ABS</u> Case No.: <u>ESE 0702</u>	SAS No.: SDG No.: <u>SD-7-SU-07-6</u>
Instrument ID Number: CVAA	Mathod: <u>CV</u>
Start Date: 7/2/2007	End Date: <u>7/2/2007</u>

EPA														Ana	ly	tes	3										Í
No.	D/F	Time	* R	A L	S B	A S	B A	BB	C D	C A	C R	С 0	с Ф	F E	P B	M G	M N	н G	N I	ĸ	S E	A G	N A	T L	v	Z N	C ม
ICV	1.00	1504																x			İ	İ			<u> </u>	Ħ	ri
ICB	1.00	1508			1													x			İ	Î			Γ_		
PB	1.00	1513																x			İ	i —			<b>_</b>	Π	
LCSS	5.00	1515																x			Ì	ĺ			1		
SD-7-SU-07-6	1.00	1515								Ī								X			i	<b>—</b>			<u> </u>	$\square$	
SD-7-SU-07-18	1.00	1518																x				1			Ē		
SD-8-SU-07-6	1.00	1520								1								x	T		İ						
SD-8-SU-07-18	1.00	1522								Ī								x			Î				Ì		
SD-9-SU-07-6	1.00	1523																x			1				-		
SD-9-SU-07-18	1.00	1525								Ī								x			Î					$\square$	
CCV	1.00	1527																x	Î		Î					$\square$	
ССВ	1.00	1528																x			i					Π	
SD-10-SU-07-6	1.00	1530																x	T	-	İ						
SD-10-SU-07-18	1.00	1532														Ī		x	Ī		İ					$\square$	
SD-11-SU-07-6	1.00	1534																x	T		Î			$\square$			
SD-11-SU-07-18	1.00	1535																x	Ţ								
SD-11-SU-07-18DP	1.00	1537																x			j						
SD-11-SU-07-18MS	1.00	1539														Ī		x	Ť		Ī						T
WM-1-SU-07-10	1.00	1541												Γ				x	T		ĺ						Ì
WM-2-SU-07-6	1.00	1542																X	T								
WM-3-SU-07-9	1.00	1544																x	T								
WM-4-SU-07-8	1.00	1546														Π		x	Π								î
CCV	1.00	1547																x	T	1							
ССВ	1.00	1549															Ĩ	x	Î				Ī				
WM-4-SU-07-8DP	1.00	1551														Ī	Î	X	T								
WM-4-SU-07-8MS	1.00	1552										1	1			Ì		x	Ť								Ť
CCV	1.00	1608												Ì	Î	ĺ		x									Ť
ССВ	1.00	1609														Î	Î	x	Ì				ĺ				$\neg$

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DATA

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ethod: SPEX	Sample Name:	Blank	Operat	or:	
omment: un Time: 07/18,	/07 10:37 Type:	Std Mode:	IR Corr.	Fact: 1.000000	
lem	Ag3280	Al3082	A13961	As1937	Au2427
ine	328.068 (102)	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 {138}
nits	Cts/S	Cts/S	Cts/S	Cts/S	Cts/s
.vg	.0263	.3685	.0430	.1083	0997
tddev	.0215	.0156	.0803	.0179	.0476
RSD	81.87	4.239	187.0	16.51	47.73
1	.0416	.3796	0139	.1209	0660
2	.0111	.3575	.0998	.0957	1333
:lem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
,ine	249.678 {135}	493.409 { 68}	313.042 (107)	190.241 {176}	317.933 {105}
!nits	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
.vg	.1691	2.441	.7578	.0219	0208
:tddev	.0061	.039	.0214	.0022	.0411
.RSD	3.622	1.591	2.830	9.970	198.0
1	.1648	2.469	.7730	.0204	.0083
2	.1734	2.414	.7426	.0235	0499
lem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
ine	228.802 (147)	228.616 {147}	357.869 { 94}	324.754 {103}	259.940 (129)
Inits	Cts/S	Cts/S	Cts/S	Cts/S	Cts/s
VVg	0796	.0105	.0554	.1787	.5702
itddev	.0340	.0550	.0039	.0020	.0184
.RSD	42.75	524.2	7.057	1.110	3.223
⊧1	1037	.0494	.0582	.1773	. 5572
⊧2	0555	0284	.0527	.1801	. 5832
llem Jnits Vvg Stddev ≩RSD	Ge2068 206.866 {162} Cts/S .1247 .0070 5.611	In2306 230.606 {146} Cts/S .0268 .0004 1.608	K_7664 766.490 { 44} Cts/S 1.643 .196 11.94	Li6103 610.362 { 55} Cts/S -37.40 .29 .7720	Mg3838 383.826 { 87} Cts/S 0346 .0098 28.30
⊧1	.1197	.0271	1.505	-37.60	0277
⊧2	.1296	.0265	1.782	-37.19	0416
lem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Jnits	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Vvg	.4665	.0083	-64.18	12.63	0457
Stddev	.0226	.0275	1.75	.61	.0384
SRSD	4.854	330.0	2.724	4.807	84.10
<sup>‡</sup> 1	-4825	.0278	-65.42	12.20	0185
<sup>‡</sup> 2	-4505	0111	-62.95	13.06	0728
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103)	203.646 {164}	214.423 {156}
Jnits	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5591	.0441	0526	0096	.0309
Stddev	.0088	.0144	.0039	.0022	.0035
&RSD	1.570	32.63	7.458	22.81	11.32
<u>ነ</u>	5529	.0543	0499	0080	.0284
ነ	5653	.0339	0554	0111	

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lem Jnits Nvg Stddev SRSD	Ru2402 240.272 (140) Cts/S .3076 .0126 4.105	Sb2068 206.833 {162} Cts/S .0373 .0161 43.24	Se1960 196.090 {171} Cts/S .0321 .0061 19.05	Si2881 288.158 {116} Cts/S .0997 .0000 .0139	Sn1899 189.989 {176} Cts/S .0133 .0223 167.7
⊧1	.3165	.0487	.0278	.0997	.0290
⊧2	.2987	.0259	.0364	.0998	0025
Clem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Jine	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Jnits	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	0224	.1213	0299	.0429	0238
Stddev	.0035	.0214	.0074	.0059	.0109
ARSD	15.70	17.62	24.78	13.70	45.93
<b>}1</b>	0249	.1364	0352	.0388	0160
<b>∦</b> 2	0200	.1061	0247	.0471	0315
Clem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Jnits	Cts/S	Cts/S	Cts/S	Cts/S	
Avg	00B3	.0898	.5751	0970	
Stddev	.0823	.0092	.0148	.1136	
&RSD	990.6	10.21	2.570	117.2	
#1	0665	.0833	.5856	0166	
#2	.0499	.0963	.5647	1773	

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01/10/01 10:44:32

page 1

lethod: Si	PEX Sampl	e Name:	200.7-1			Operato	DI:		
un Time:	07/18/07 10:4	1 Type:	Std	Mode:	IR	Corr.	Fact: 1.000000		
:lem ,ine !nits .vg :tddev :RSD	308.215	Al3082 {109} Cts/S 30.64 .19 .6328	A 396.152	13961 [ 85} Cts/S 218.7 .3 .1213	C 317.933	a3179 {105} Cts/S 191.8 .5 .2754	K_7664 766.490 { 44} Cts/S 1249. B. .6536	Mg38 383.826 { 8 Cts 100 .21	38 7} /S .7 .2 93
.1 2		30.78 30.51		218.8 218.5		192.2 191.4	1255. 1243.	100 100	.9 .6
lem ine Jnits vyg Stddev RSD	588.995	Na5889 { 57} Cts/S 8698. 1. .0121	N 589.592	la5895 { 57} Cts/S 4683. 5. .1000	N 231.604	i2316 {145} Cts/S 1080. 1. .0992	Zn2138 213.856 {157} Cts/S 2851. 2. .0745		
1 1		8699. 8697.		4686. 4679.		1079. 1081.	2849. 2852.		

nalysis keport		U//1	0/0/ 10:40:54	page	T
lethod: SPEX	Sample Name:	200.7-2	Operat	cor:	
un Time: 07/18/	07 10:45 Type:	Std Mode:	IR Corr.	Fact: 1.000000	
lem ine lnits Wg itddev	Ba4934 493.409 { 68} Cts/S 1853. 8.	Be3130 313.042 {107} Cts/S 1058. 1.	Co2286 228.616 {147} Cts/S 643.3 .7	Cu3247 324.754 {103} Cts/S 39.59 .11	Fe2599 259.940 {129} Cts/S 5117. 20.
\$RSD #1 #2	.4426 1847. 1859.	.0979 1058. 1059.	.1116 642.8 643.8	.2720 39.66 39.51	5103. 5132.
lem Jine Jnits Avg Stddev &RSD	Mn2576 257.610 {131} Cts/S 1859. 1. .0534	Sr3464 346.446 { 97} Cts/S 177.4 .1 .0363			
‡1 ±2	1859. 1860.	177.3 177.4			

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<pre>iethod: SE comment:</pre>	PEX	Sample	Name:	200.7-3			Operat	or:	
Run Time:	07/18/07	10:49	Туре:	Std	Mode:	IR	Corr.	Fact: 1.	000000
len		В	2496	(	Cd2288	1	РЬ2203		T11908
Jine	24	19.678	[135]	228.802	{147}	220.353	{152}	190.864	{176}
Jnits		(	Cts/S		Cts/S		Cts/S		Cts/S
}∧à			30.01		198.8		33.21		10.50
Stddev			.03		.1		.09		.03
RSD			.0947		.0591		.2582		.2871
±1		2	29.99		198.7		33.15		10.52
12			30.03		198.8		33.27		10.47

Wethod: SPEX	Sample Name:	200.7-4	Operator:	
Run Time: 07/18/(	7 11:01 Type:	Std Mode:	IR Corr.Fact:	1.000000
Clem Line Dits	Mo2020 202.030 {166}	Sb2068 206.833 (162)	Ti3361 336.121 (100)	
Avg Stddov	1124.	226.8	Cts/S 641.1	

Stddev	17.	6.5	1.8
¥RSD	1.517	2.863	.2757
<b>#1</b>	1112.	222.2	642.4
#2	1136.	231.4	639.9

lethod: SI	PEX .	Sample	Name:	1 PPM	I AG			Operator:	
un Time:	07/18/07	11:10	Type:	Std		Mode:	IR	Corr.Fact:	1.000000
lem ine inits Vg itddev RSD	32	A0 28.068 (	g3280 {102} Cts/S 32.32 .00 .0065						
1  2			32.32 32.32						

07/18/07 11:17:34

sthod: SE	PEX	Sample	Name:	200.7			Operato	or:			
omment: in Time:	07/18/07	11:14	Type:	Std	Mode:	IR	Corr.	Fact: 1.0	00000		
lem ine nits vg tddev RSD	19	A 93.759	s1937 {173] Cts/S 33.30 .03 .0995	( 357.869	Cr3578 { 94} Cts/S 34.28 .02 .0535	L 610.362	i6103 { 55) Cts/S 413.6 .5 .1251	s 196.090	e1960 {171} Cts/S 28.27 .19 .6852	5 189.989	in1899 {176] Cts/S 72.87 .34 .4723
1 2			33.28 33.33		34.27 34.29		414.0 413.3		28.13 28.41		72.62 73.11
.lem .ine !nits .vg :tddev :RSD	2	v 92.402	2924 {115} Cts/S 24.58 .13 .5325								
1 12			24.67 24.48								

ethod :	SPEX	Standardzn	Report	07/18/07	11:24:16	
l Name	Slope	Y-int	Correl	lation	Date Stdi	zed
d3280	0.0323	0.0263	1.0000	0000	07/18/07	11:13:55
13082	0 0030	0.3685	1.0000	0000	07/18/07	10:44:32
13061	0 0219	0.0430	1.0000	0000	07/18/07	10:44:32
1037	0.0166	0.1083	1.0000	0000	07/18/07	11:17:34
51937	0.0793	-0.0997	1.0000	0000	07/18/07	10:40:28
2406	0.0792	0.1691	1.000	0000	07/18/07	10:52:54
2490	1 2503	2.4411	1.000	0000	07/18/07	10:48:54
34934	1 0577	0 7578	1.000	0000	07/18/07	10:48:54
·63130	0.0004	0 0219	1.000	0000	07/18/07	10:40:28
,11902	0.0094	-0.0208	1.000	0000	07/18/07	10:44:32
:a3179	0.0192	-0 0796	1.000	0000	07/18/07	10:52:54
:02286	0.3917	0 0105	1 000	0000	07/18/07	10:48:54
:02286	0.3210	0.0100	1,000	0000	07/18/07	11:17:34
:r3578	0.0171	0 1787	1 000	0000	07/18/07	10:48:54
313247	0.0394	0.5702	1 000	0000	07/18/07	10:48:54
'e2599	0.0117	0.1247	1.000	0000	07/18/07	10:40:28
je2068	0.0077	0.1237	1 000	0000	07/18/07	10:40:28
In2306	0.0250	1 6435	1 000	0000	07/18/07	10:44:32
(_7664	0.1247	1.0300	2 1 000	0000	07/18/07	11:17:34
L16103	0.2255	-0.0346	1 000	0000	07/18/07	10:44:32
4g3838	0.0101	0.0540	1 000	0000	07/18/07	10:48:54
in2576	1.8588	0.4003	1 000	0000	07/18/07	11.04:24
102020	0.1124	CA 1930	2 1 000	0000	07/18/07	10-44:32
Va5889	0.8/62	104.1030	1 000	0000	07/18/07	10.44.32
Va5895	0.4670	12.0307	1 000	0000	07/18/07	10-44-32
Ni2316	0.2160	-0.0437	1 000	0000	07/18/07	10-40-28
Js2255	0.0371	-0.0391	1.000	0000	07/18/07	10.52.54
РЬ2203	0.0332	0.0441	1.000	0000	07/19/07	10.02.01
Pd3242	0.0000	-0.0526	_1_00	0000	07/18/07	10.40.28
Pt2036	-0.000/	-0.0096	-1.00	00000	07/10/07	10.40.28
Pt2144	0.0141	0.0309	1 000	0000	07/18/07	10.40.28
Ru2402	0.0737	0.3070	1.000	00000	07/10/07	11.04.24
SD2068	0.0227	0.0373	1.000	00000	07/10/07	11.17.34
Se1960	0.0141	0.0321	1.000	0000	07/10/07	10.40.28
Si2801	0.0028	0.0997	1.000	0000	07/10/07	11.17.24
Sn1899	0.0364	0.0133	1.000	0000	07/10/07	10.40.54
Sr3464	0.0177	-0.0224	1.000		07/18/07	10.40.39
Ta2400	-0.0101	0.1213	-1.00	00000	07/10/07	10:40:20
Te2142	0.0146	-0.0299	1.000		07/10/07	11.04.24
Ti3 <b>361</b>	0.0641	0.0429	T-000	0000	07/10/07	10.52.54
T11908	0.0105	-0.023B	1.000	0000	07/18/07	11.17.24
V_2924	0.0123	-0.0083	1.000	0000	07/18/07	11:1/:34
w 2397	0.0376	0.0898	1.000	00000	07/18/07	11:0/:58
Zn2138	0.5701	0.5751	1.000	00000	07/18/07	10:44:32
Zr3391	0.0660	-0.0970	1.000	00000	07/18/07	10:40:28

ethod: SPEX

Sample Name: ICV-1

07/18/07 11:40:08

Operator:

page 1

omment: un Time:	07/18/07 11:39 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
lem	Ag3280	A13082	Al3961	As1937	Au2427
ine	328.068 {102}	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 {138}
nits	ppb	ppb	ppm	ppb	ppb
vg	488.5	2186.	2082.	2018.	<.0000
tddev	.8	32.	6.	1.	.8529
RSD	.1628	1.482	.2745	.0492	5.900
-1	489.0	2209.	2078.	2017.	<.0000
-2	487.9	2163.	2086.	2018.	<.0000
llem	B 2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 [ 68}	313.042 {107}	190.241 [176]	317.933 {105}
Jnits	ppb	ppb	ppb	ppm	ppb
Avg	1919.	2070.	2044.	.7908	2027.
Stddev	3.	13.	9.	.5127	4.
&RSD	.1754	.6096	.4284	64.83	.1777
⊭1	1917.	2079.	2051.	.4283	2029.
#2	1922.	2061.	2038.	1.153	2024.
Elem Line Jnits Avg Stddev %RSD	Cd2288 228.802 {147} ppb 2119. 6. .2678	Co2286 228.616 {147} ppb 2054. 4. .1840	Cr3578 357.869 { 94} ppb 2007. .0102	Cu3247 324.754 {103} ppb 2016. .0161	Fe2599 259.940 {129} ppb 2096. .0099
#1	2115.	2051.	2007.	2016.	2096.
#2	2123.	2057.	2007.	2016.	2096.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44)	610.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	9756.	2002.	2042.
Stddev	.5662	.2366	44.	9.	3.
&RSD	3.399	14.67	.4523	.4497	.1227
#1	<.0000	<.0000	9788.	1996.	2040.
#2	<.0000	<.0000	9725.	2009.	2044.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	2007.	2082.	1827.	2030.	2106.
Stddev	5.	1.	3.	4.	2.
%RSD	.2334	.0501	.1466	.2138	.1176
#1	2004.	2082.	1825.	2033.	2104.
#2	2010.	2083.	1829.	2027.	2107.
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103)	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	31.47	2162.	4010.	409.8	<.0000
Stddev	1.76	3.	1233.	23.8	63.83
%RSD	5.609	.1518	30.76	5.801	3.846
#1	32.72	2160.	3138.	393.0	< .0000
#2	30.22	2164.	4882.	426.6	< .0000

ample Name: ICV-1 Run Time: 07/18/07 11:39

lem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
ine	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
nits	ppb	ppb	ppb	ppb	ppb
vg	<.0000	2019.	2024.	4028.	2012.
tddev	.5623	7.	2.	2.	5.
.RSD	18.20	.3637	.1225	.0533	.2520
1	<.0000	2014.	2026.	4030.	2009.
\$2	<.0000	2024.	2022.	4027.	2016.
lem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Jine	346.446 { 97}	240.063 {140}	214.281 [157}	336.121 (100)	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Vg	2043.	23.81	<.0000	<.0000	2150.
Stddev	3.	1.60	.1785	.4588	
BRSD	.1505	6.707	.0603	12.78	.0139
⊧1	2046.	24-94	<.0000	<.0000	2150.
}2	2041.	22-68	<.0000	<.0000	2150.
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157]	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	2022.	<.0000	2062.	.7551	
Stddev	10.	11.49	1.	.6535	
&RSD	.5061	1.271	.0303	86.55	
#1	2029.	< .0000	2062.	1.217	
#2	2015.	< .0000	2063.	.2930	

Sample Name: ICB-1

07/18/07 11:43:27

Operator:

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4ethod: SI	PEX Sample Name:	ICB-1	Operato	or:	
Comment: Run Time:	07/18/07 11:40 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Elem	Ag3280	Al3082	A13961	As1937	Au2427
Line	328.068 {102}	308.215 {109}	396.152 ( 85)	193.759 (173)	242.795 {138}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	<.0000	15.13	<.0000	.3902	<.0000
Stddev	.6068	18.77	.7171	.4204	.1815
&RSD	61.50	124.0	20.57	107.7	116.7
51	<.0000	28.40	<.0000	.0930	<.0000
#2	<.0000	1.862	<.0000	.6875	<.0000
Elem	B 2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Units	ppb	ppb	ppb	ppm	ppb
Avg	.5791	.1044	<.0000	1.483	1.373
Stddev	.0702	.0773	.0185	.839	4.291
%RSD	12.13	74.02	289.3	56.58	312.6
#1	.6287	.1590	.0067	2.077	< .0000
#2	.5294	.0498	<.0000	.8898	4.407
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 [147}	357.869 { 94}	324.754 (103)	259.940 (129)
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	.0691	<.0000	1.126	.0247
Stddev	.0922	.0271	5.497	.845	.0793
%RSD	237.6	39.29	566.1	75.05	321.4
#1	.0264	.0883	< .0000	1.724	.0808
#2	<.0000	.0499	2.916	.5286	<.0000
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	.6000	.3824	<.0000	4.112	.9620
Stddev	2.888	.4225	.3923	.293	1.556
%RSD	481.2	110.5	9.373	7.127	161.8
#1	< .0000	.0837	<.0000	4.319	2.062
#2	2.642	.6812	<.0000	3.904	< .0000
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	1.306	<.0000	<.0000	.2242
Stddev	.0014	.128	.2653	.2060	.0182
%RSD	1.494	9.800	4.675	1.159	8.105
#1	<.0000	1.216	<.0000	<.0000	.2371
#2	<.0000	1.397	<.0000	<.0000	.2114
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 (152)	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000	<.0000
Stddev	1.317	.2631	164.5	10.70	.2788
%RSD	188.6	12.91	15.72	44.66	32.64
#1	.2331	<.0000	< .0000	< .0000	<.0000
#2	< .0000	<.0000	< .0000	< .0000	<.0000

ample Name: ICB-1 Run Time: 07/18/07 11:40

lem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
ine	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 [176]
Jnits	ppb	ppb	ppb	ppb	ppb
vg	.2928	3.238	<.0000	2.978	.2626
tddev	.6332	.674	1.483	.002	.0479
kRSD	216.2	20.80	199.6	.0495	18.25
1	<.0000	3.714	< .0000	2.977	.2965
12	.7405	2.762	.3058	2.979	.2287
lem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.064 (176)
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	1.078	2.625	.4023	<.0000	<.0000
Stddev	.133	3.669	.5988	.6725	.5808
&RSD	12.30	139.7	148.8	88.91	48.31
#1	1.172	5.220	.8257	<.0000	<.0000
#2	.9840	.0312	<.0000	<.0000	<.0000
Elem	v 2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	<.0000	.3769	<.0000	1.028	
Stddev	.9564	.9853	.0077	.208	
&RSD	35.34	261.4	3.123	20.20	
#1	<.0000	<.0000	<.0000	.8815	
#2	<.0000	1.074	<.0000	1.175	

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iethod: S	PEX Sample	Name:	CRI-1	Operato	or:	
lomment: Run Time:	07/18/07 11:45	Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
llem Jnits lvg Stdde⊽ kRSD	Aq 328.068	3280 [102] ppb 19.91 1.02 5.146	Al3082 308.215 {109} ppb 36.11 23.89 66.18	Al3961 396.152 { 85} ppm 1.521 .091 5.973	As1937 193.759 {173} ppb 20.45 1.29 6.287	Au2427 242.795 {138} ppb <.0000 .3134 22.50
₿1 ₿2	1	20.63 19.18	53.00 19.21	1.457 1.585	19.54 21.36	<.0000 <.0000
Elem Line Onits Avg Stddev &RSD	В 249.678	2496 {135} ppb 1.076 .281 26.13	Ba4934 493.409 { 68} ppb .1140 .0810 71.06	Be3130 313.042 {107} ppb 9.714 .056 .5733	Bi1902 190.241 {176} ppm <.0000 .1866 14.51	Ca3179 317.933 {105} ppb 3.251 .612 18.83
#1 #2		1.274 .8768	.0567 .1712	9.753 9.674	<.0000 <.0000	3.684 2.818
Elem Line Units Avg Stddev %RSD	C 228.802	d2288 {147} ppb 9.938 .045 .4545	Co2286 228.616 {147} ppb 99.38 .14 .1380	Cr3578 357.869 { 94} ppb 19.59 1.82 9.310	Cu3247 324.754 (103) ppb 50.28 1.82 3.622	Fe2599 259.940 {129} ppb 1.040 .034 3.262
#1 #2		9.906 9.970	99.28 99.47	20.88 18.30	51.57 48.99	1.016 1.064
Elem Line Units Avg Stddev %RSD	G 206.866	e2068 {162} ppm 2.123 .511 24.10	In2306 230.606 {146} ppb .7530 1.048 139.2	K_7664 766.490 { 44} ppb <.0000 .0032 .0781	Li6103 610.362 { 55} ppb 1.791 .048 2.664	Mg3838 383.826 { 87} ppb 3.026 7.584 250.6
#1 #2		2.484 1.761	1.494 .0119	<.0000 <.0000	1.757 1.824	< .0000 8.389
Elem Line Units Avg Stddev %RSD	ی 257.610	in2576 {131} ppb 29.45 .05 .1690	Mo2020 202.030 (166) ppb .9358 .0311 3.328	Na5889 588.995 { 57} ppb 5.007 .587 11.72	Na5895 589.592 { 57} ppb <.0000 .2985 6.784	Ni2316 231.604 (145) ppb 82.95 .02 .0216
#1 #2		29.42 29.49	.9578 .9138	5.422 4.592	<.0000 <.0000	82.96 82.93
Elem Line Units Avg Stddev %RSD	225.585 	0s2255 {149} ppB <.0000 1.437 454.2	Pb2203 220.353 {152} ppb 5.378 .039 .7226	Pd3242 324.270 {103} ppb <.0000 738.7 423.6	Pt2036 203.646 {164} ppb 1.261 .002 .1275	Pt2144 214.423 {156} ppb <.0000 2.230 70.71
#1 #2	<	.0000 .6998	5.350 5.405	< .0000 347.9	1.262 1.260	<pre>&lt; .0000 &lt; .0000</pre>

ample Name: CRI-1 Run Time: 07/18/07 11:45

llem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Jine	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Vg	.4940	96.85	10.23	1.487	.4828
Stddev	.6339	2.97	.43	6.287	.1199
SD	128.3	3.070	4.243	422.8	24.83
i1	.9422	94.75	10.53	5.933	.5676
i2	.0457	98.95	9.921	< .0000	.3981
Clem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 (100)	190.864 (176)
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	1.547	<.0000	<.0000	<.0000	20.18
Stddev	2.254	1.121	.7802	.5807	.54
tRSD	145.7	94.16	5.271	103.3	2.681
₩1	< .0000	<pre>&lt; .0000</pre>	<.0000	<.0000	20.56
₩2	3.140	< .0000	<.0000	<.0000	19.80
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	92.77	<.0000	40.78	<.0000	
Stddev	1.78	.8654	.04	1.069	
%RSD	1.924	1.912	.0860	847.6	
#1	91.51	<.0000	40.76	.6299	
#2	94.03	<.0000	40.81	< .0000	

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ethod: SI	PEX Sample Name:	ICSA-1	Operato	DI:	
omment: un Time:	07/18/07 11:50 Type:	Unk Mode:	CONC Corr. H	Fact: 1.000000	
lem	Ag3280	A13082	Al3961	As1937	Au2427
ine	328.068 (102)	308.215 (109)	396.152 { 85}	193.759 {173}	242.795 {138}
nits	ppb	ppb	ppm	ppb	ppb
vg	<.0000	449500.	367300.	<.0000	<.0000
tddev	.0582	1100.	1035.	1.338	1.938
RSD	.2412	.2446	.2817	4.185	.7671
1	<.0000	448800.	366600.	< .0000	<pre>&lt; .0000 &gt; </pre>
2	<.0000	450300.	368100.	< .0000	
llem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 [ 68}	313.042 {107}	190.241 {176}	317.933 {105}
Jnits	ppb	ppb	ppb	ppm	ppb
Avg	<.0000	1.185	.0006	30.06	348800.
Stddev	1.920	.041	.0205	4.52	168.
&RSD	.5337	3.422	3603.	15.03	.0482
#1	<pre>&lt; .0000 &lt; .0000</pre>	1.214	.0150	33.26	348700.
#2		1.156	<.0000	26.87	348900.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 {147}	357.869 { 94}	324.754 {103}	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000	117800.
Stddev	.0134	.0352	3.316	.3506	867.
&RSD	.7395	3.853	14.65	1.365	.7358
#1	<.0000	<.0000	<pre>&lt; .0000 &lt; .0000</pre>	<.0000	117200.
#2	<.0000	<.0000		<.0000	118400.
Elem	Ge2068	In2306	K 7664	Li6103	Mg3838
Line	206.866 (162)	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	18.18	<.0000	<.0000	<.0000	425200.
Stddev	2.38	1.472	.6746	.0290	656.
&RSD	13.10	8.964	2.685	.0084	.1543
#1	16.50	<pre>&lt; .0000 &lt; .0000</pre>	<.0000	<.0000	425700.
#2	19.86		<.0000	<.0000	424700.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 (57)	589.592 { 57}	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	25.56	13.40	<.0000
Stddev	.0486	.2598	.18	.53	.1379
%RSD	2.182	10.40	.7029	3.977	.9311
#1	<.0000	<.0000	25.44	13.03	<.0000
#2	<.0000	<.0000	25.69	13.78	<.0000
Elem	Os2255	5 Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppF	8 ppb	ppb	ppb	ppb
Avg	2317	<.0000	4184.	1887.	<.0000
Stddev	15	.5104	1151.	9.	1.656
&RSD	.6374	4 .4893	27.51	.4622	1.132
#1	2307	<.0000	4998.	1893.	<pre>&lt; .0000</pre>
#2	2327	<.0000	3370.	1881.	< .0000

Sample Name: ICSA-1 Run Time: 07/18/07 11:50

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	16.03	<.0000	<.0000	2.236
Stddev	8.205	3.13	.3113	8.402	.539
ARSD	2.862	19.56	1.329	285.4	24.12
#1	<pre>&lt; .0000</pre>	18.24	<.0000	< .0000	1.855
#2	< .0000	13.81	<.0000	2.997	2.618
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97]	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	7.550	839.1	<.0000	<.0000	<.0000
Stddev	.265	7.1	.0296	1.007	.4574
&RSD	3.505	.8491	4.113	3.918	4.999
#1	7.363	844.2	<.0000	<pre>&lt; .0000 &gt; </pre>	<.0000
#2	7.737	834.1	<.0000		<.0000
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99)	
Units	ppb	ppb	ppb	ppb	
Avg	6.090	127.8	3.801	4.116	
Stddev	.958	.0	.142	.357	
%RSD	15.73	.0105	3.735	8.668	
#1	6.767	127.8	3.901	4.368	
#2	5.413	127.8	3.701	3.864	

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iethod: SH	PEX Sample Name:	ICSAB-1	Operato	or:	
Comment: Run Time:	07/18/07 12:02 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Clem	Ag3280	A13082	A13961	As1937	Au2427
Line	328.068 {102}	308.215 (109)	396.152 { 85}	193.759 {173}	242.795 {138}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	906.3	440800.	367300.	<.0000	<.0000
Stddev	5.3	1878.	1859.	.4208	.6322
ERSD	.5818	.4261	.5063	1.103	.2381
⊭1	902.6	439500.	368600.	<.0000	<.0000
#2	910.0	442100.	366000.	<.0000	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 [105]
Units	ppb	ppb	ppb	ppm	ppb
Avg	<.0000	477.2	449.8	31.81	348900.
Stddev	.0782	.7	.9	.37	631.
&RSD	.0213	.1433	.1950	1.173	.1808
#1	<.0000	476.7	449.2	32.07	348400.
#2	<.0000	477.7	450.4	31.54	349300.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Líne	228.802 {147}	228.616 {147}	357.869 { 94}	324.754 (103)	259.940 {129)
Units	ppb	ppb	ppb	ppb	ppb
Avg	967.1	418.8	458.2	420.7	117900.
Stddev	3.0	.9	.7	.5	268.
&RSD	.3129	.2039	.1588	.1142	.2269
#1	965.0	418.2	457.7	421.1	117700.
#2	969.3	419.4	450.7	420.4	118100.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	15.53	<.0000	<.0000	<.0000	419600.
Stdde⊽	.79	1.301	.7382	3.639	685.
%RSD	5.106	7.879	3.625	1.033	.1633
#1	16.10	< .0000	<.0000	< .0000	420100.
#2	14.97	< .0000	<.0000	< .0000	419100.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	477.1	1.358	37.07	26.18	806.1
Stddev	.6	.093	.23	.18	2.3
&RSD	.1213	6.856	.6263	.6738	.2854
#1	476.7	1.424	37.24	26.06	804.5
#2	477.5	1.292	36.91	26.31	807.7
Elem	0s2255	РЬ2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ррЬ	ppb	ppb	ppb
Avg	2420.	1002.	5638.	2107.	<.0000
Stddev	5.	2.	1727.	44.	2.848
&RSD	.1937	.1968	30.63	2.087	.4895
#1	2417.	1000.	6859.	2076.	<pre>&lt; .0000 &lt; .0000</pre>
#2	2423.	1003.	4417.	2138.	
sample Name: ICSAB-1 Run Time: 07/18/07 12:02

Clem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	20.98	<.0000	<.0000	2.592
Stddev	.1060	3.56	.6490	2.101	.036
ARSD	.0367	16.97	2.654	6.153	1.387
₩1	<.0000	23.50	<.0000	<pre>&gt; 0000 &gt; </pre>	2.566
₩2	<.0000	18.46	<.0000		2.617
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97]	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	5.486	867.8	<.0000	<.0000	<.0000
Stddev	1.592	5.3	1.677	.1203	1.908
%RSD	29.02	.6116	2.555	.4505	12.35
류그	6.612	864.0	<pre>&lt; .0000</pre>	<.0000	< .0000
#2	4.361	871.5	< .0000	<.0000	< .0000
Elem	V_2924	₩_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140)	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	439.0	<.0000	916.4	4.767	
Stddev	2.2	.0810	2.5	.029	
%RSD	.5010	.4049	.2722	.6179	
#1	437.5	<.0000	914.6	4.746	
#2	440.6	<.0000	918.2	4.788	

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iethod: SI	PEX Sample Name:	CCV-1	Operat	or:	
Comment: Run Time:	07/18/07 12:07 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Clem	Ag3280	Al3082	Al3961	As1937	Au2427
Line	328.068 {102}	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 {138}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	491.9	2093.	2048.	2035.	<.0000
Stddev	2.3	3.	1.	13.	.4957
&RSD	.4750	.1574	.0293	.6183	.8090
<b>₽1</b>	490.2	2091.	2048.	2026.	<.0000
₽2	493.5	2096.	2047.	2044.	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Units	ppb	ppb	ppb	ppm	ppb
Avg	1922.	2094.	2071.	<.0000	2010.
Stddev	9.	1.	5.	1.492	5.
%RSD	.4481	.0705	.2508	46.65	.2690
<b>#1</b>	1916.	2093.	2075.	<pre>&lt; .0000</pre>	2014.
#2	1929.	2095.	2067.	< .0000	2006.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 {147}	357.869 { 94}	324.754 {103}	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	2116.	2055.	1971.	2005.	2143.
Stddev	6.	6.	3.	4.	21.
%RSD	.3012	.3034	.1600	.2169	.9803
#1	2111.	2051.	1974.	2008.	2158.
#2	2120.	2060.	1969.	2002.	2128.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	9865.	1934.	2037.
Stddev	3.171	.1859	6.	2.	1.
%RSD	48.88	64.83	.0587	.1208	.0306
#1	<pre>&lt; 0000 &lt; 0000</pre>	<.0000	9869.	1936.	2036.
#2		<.0000	9861.	1933.	2037.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	1999.	2088.	2197.	2032.	2115.
Stddev	7.	46.	3.		8.
&RSD	.3298	2.205	.1494	.0017	.3722
#1	1994.	2056.	2194.	2032.	2109.
#2	2003.	2121.	2199.	2032.	2120.
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 (149)	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	11.80	2150.	5229.	417.3	<.0000
Stddev	1.06	6.	985.	19.0	22.88
%RSD	8.975	.2725	18.83	4.557	2.051
∯1	12.55	2146.	4533.	430.8	<pre>&lt; .0000 &lt; .0000</pre>
∯2	11.05	2154.	5926.	403.9	

Sample Name: CCV-1 Run Time: 07/18/07 12:07

llem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 [116]	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	1970.	2040.	3954.	2002.
Stddev	.2604	71.	19.	2.	9.
ARSD	6.528	3.614	.9385	.0503	.4473
‡1	<.0000	1920.	2027.	3953.	1995.
≩2	<.0000	2021.	2054.	3955.	2008.
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 [ 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	2044.	17.86	<.0000	<.0000	2147.
Stddev	2.	3.88	.2988	.0609	8.
&RSD	.0808	21.76	.4211	5.119	.3505
₿1	2042.	15.11	<.0000	<.0000	21 <b>4</b> 2.
#2	2045.	20.60	<.0000	<.0000	2153.
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 (140)	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg .	2116.	<.0000	2082.	<.0000	
Stddev	12.	.8334	7.	.2658	
&RSD	.5775	.5427	.3219	23.88	
#1	2100.	<.0000	2077.	<.0000	
#2	2125.	<.0000	2086.	<.0000	

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fethod: S	PEX Sample	Name:	CCB-1	Opera	tor:	
Run Time:	07/18/07 12:11	Type:	Unk Mode:	CONC Corr	.Fact: 1.000000	
llem Line Jnits	Aq 328.068	g3280 [102] ppb	A13082 308.215 {109} ppb	Al3961 396.152 { 85} ppm	As1937 193.759 {173} ppb	Au2427 242.795 {138} ppb
Avg Stddev &RSD	2	.4851 226.2	8.37 46.85	2.330 408.1	.1054 51.62	.3906 167.3
#1 #2	<.	.0000 .1286	11.94 23.77	< .0000 1.077	<.0000 <.0000	<.0000 .0427
Elem Line Jnits Avg Stddev &RSD	B 249.678 <	2496 {135} ppb .0000 .0263 19.56	Ba4934 493.409 { 68} ppb .0331 .0609 184.4	Be3130 313.042 [107] ppb <.0000 .0392 1537.	Bi1902 190.241 [176] 9889 2.471 249.8	Ca3179 317.933 {105} ppb 3.974 3.883 97.72
#1 #2	< <	.0000	<.0000 .0761	.0251 <.0000	2.736 < .0000	6.719 1.228
Elem Line Units Avg Stddev %RSD	Cd 228.802 <	12288 {147} ppb 0000 1339 227.0	Co2286 228.616 {147} ppb .1123 .1479 131.7	Cr3578 357.869 { 94) ppb 1.537 2.176 141.6	Cu3247 324.754 {103} ppb .4925 .8435 171.3	Fe2599 259.940 {129} ppb 12.52 5.37 42.89
#1 #2	<	.0000 .0357	.0077 .2168	3.076 < .0000	<.0000 1.089	16.32 0.723
Elem Line Units Avg Stddev &RSD	G- 206.866	≥2068 {162} ppm 2.404 .452 18.82	In2306 230.606 {146} ppb <.0000 .9127 694.6	K_7664 766.490 { 44} ppb <.0000 .2697 4.572	Li6103 610.362 { 55} ppb 2.566 2.131 83.06	Mg3838 383.826 { 87} ppb .1364 4.669 3422.
#1 #2		2.723 2.084	<.0000 .5140	<.0000 <.0000	4.073 1.059	< .0000 3.438
Elem Line Units Avg Stddev %RSD	Mi 257.610 <	n2576 {131} ppb .0000 .0261 35.92	Mo2020 202.030 {166} ppb .5599 .1048 18.72	Na5889 588.995 { 57} ppb <.0000 .1256 1.776	Na5895 589.592 { 57} ppb <.0000 .2735 1.555	Ni2316 231.604 {145} ppb .0700 .1071 153.0
#1 #2	<	.0000	.4858 .6340	<.0000 <.0000	<.0000 <.0000	<.0000 .1457
Elem Line Units Avg Stddev %RSD	0: 225.585 <	s2255 {149} ppB .0000 1.036 345.1	Pb2203 220.353 [152] ppb <.0000 .3684 30.70	Pd3242 324.270 {103} ppb 58.02 574.4 989.9	Pt2036 203.646 {164} ppb <.0000 1.189 6.578	Pt2144 214.423 {156} ppb .0659 2.199 3338.
#1 #2	<	.4324	<.0000 <.0000	464.2 < .0000	0000. > 0000. >	< .0000 1.621

Sample Name: CCB-1 Run Time: 07/18/07 12:11

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 (171)	288.150 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	.1383	1.170	.6776	13.37	<.0000
Stddev	.1538	.058	.0926	6.28	.0479
&RSD	111.2	4.943	13.67	47.00	568.0
#1	.2470	1.129	.7431	8.924	.0254
#2	.0295	1.211	.6121	17.81	<.0000
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97]	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	<.0000	1.800	.3387	<.0000	<.0000
Stddev	1.590	4.663	1.168	.3362	.5808
%RSD	147.5	259.0	344.8	51.85	73.34
#1	.0464	5.098	< .0000	<.0000	<.0000
#2	< .0000	< .0000	1.164	<.0000	<.0000
Elem	V 2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	<.0000	<.0000	<.0000	.7765	
Stddev	3.666	1.090	.0492	.3861	
&RSD	650.6	402.9	20.31	49.73	
#1	2.029	.5001	<.0000	.5035	
∉2	< .0000	< .0000	<.0000	1.050	

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Method: SI	EX Samj	ple Name:	CCV-2	Operat	cor:	
Comment: Run Time:	07/18/07 14	:03 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Elem	328.0	Ag3280	A13082	Al3961	As1937	Au2427
Line		58 {102}	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 {138}
Jnits		ppb	ppb	ppm	ppb	ppb
Avg		489.9	2170.	2085.	2024.	<.0000
Stddev		.2	15.	10.	8.	.8255
&RSD		.0458	.6904	.4897	.3920	5.979
#1		489.8	2181.	2093.	2019.	<.0000
#2		490.1	2160.	2078.	2030.	<.0000
Elem	249.6	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line		78 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Units		ppb	ppb	ppb	ppm	ppb
Avg		1916.	2063.	2055.	.8897	2048.
Stdde⊽		7.	3.	1.	.8389	7.
%RSD		.3887	.1620	.0277	94.29	.3582
#1		1911.	2065.	2055.	.2965	2053.
#2		1921.	2060.	2055.	1.483	2043.
Elem	228.8	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line		D2 {147}	228.616 {147}	357.869 { 94}	324.754 {103}	259.940 {129}
Units		ppb	ppb	ppb	ppb	ppb
Avg		2119.	2068.	1991.	2008.	2107.
Stddev		9.	5.	7.	9.	3.
%RSD		.4272	.2215	.3720	.4497	.1409
#1		2112.	2065.	1997.	2015.	2109.
#2		2125.	2071.	1986.	2002.	2105.
Elem	206.8	Ge2068	In2306	K_7664	Li6103	Mg3838
Line		66 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units		ppm	ppb	ppb	ppb	ppb
Avg		<.0000	<.0000	9776.	2046.	2034.
Stddev		.5095	.5239	17.	10.	5.
&RSD		2.581	27.06	.1742	.4901	.2430
#1		<.0000	<.0000	9788.	2053.	2037.
#2		<.0000	<.0000	9764.	2039.	2030.
Elem	257.6	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line		10 {131}	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Units		ppb	ppb	ppb	ppb	ppb
Avg		2015.	2042.	1846.	2052.	2121.
Stddev		4.	45.	2.	2.	4.
%RSD		.2069	2.214	.1236	.0922	.1853
#1		2012.	2010.	1847.	2053.	2119.
#2		2018.	2074.	1844.	2051.	2124.
Elem	225.5	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line		35 {149}	220.353 {152}	324.270 {103}	203.646 [164]	214.423 {156}
Units		ppB	ppb	ppb	ppb	ppb
Avg		30.34	2187.	2556.	366.5	<.0000
Stddev		.68	6.	493.	18.4	45.84
%RSD		2.250	.2863	19.30	5.029	2.614
#1		30.82	2183.	2905.	379.5	< .0000
#2		29.85	2192.	2208.	353.4	< .0000

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ple Name: CCV-2 Run Time: 07/18/07 14:03

em ie its Jdev SD	Ru2402 240.272 {140} ppb <.0000 .0000 .0006	Sb2068 206.833 {162} ppb 1979. 64. 3.212	Sel960 196.090 {171} ppb 2026. 12. .5810	Si2081 288.158 {116} ppb 4083. 4. .0992	Sn1899 189.989 {176} ppb 2036. 6. .2850
	<.0000	1934.	2018.	4080.	2032.
	<.0000	2024.	2035.	4086.	2040.
em	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
ne	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
its	ppb	ppb	ppm	ppb	ppb
g	2063.	24.14	<.0000	<.0000	2167.
ddev	10.	2.07	4.038	.1834	7.
.SD	.4891	8.581	1.336	6.476	.3373
ic	2070.	22.68	<pre>&lt; .0000</pre>	<.0000	2162.
	2056.	25.61	< .0000	<.0000	2172.
.em .ne hits rg iddev &SD	v 2924 292.402 {115} ppb 2021. .0116	W_2397 239.709 {140} ppb <.0000 10.88 1.178	Zn2138 213.856 {157} ppb 2062. 2. .0920	Zr3391 339.198 { 99} ppb .9862 .0297 3.014	
L	2021. 2020.	< .0000 < .0000	2061. 2064.	1.007	

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Method: Si	PEX	Sample Name:	CCB-2			Operat	or:	
Run Time:	07/18/07	14:05 Type:	Unk	Mode:	CONC	Corr.	Fact: 1.000000	
Elem Line Jnits Avg Stddev &RSD	32	Ag3280 8.068 {102} ppb 1.759 .850 48.29	A 308.215	13082 {109} ppb 17.87 16.18 90.55	7 396.152 <	13961 { 85} ppm .0000 1.972 115.2	As1937 193.759 {173} ppb .9484 .2633 27.76	Au2427 242.795 {138] ppb <.0000 .4016 859.6
<b>#1</b> #2		1.158 2.360	2	29.30 5.426	< <	.0000 .0000	1.135 .7623	.2373 <.0000
Elem Line Jnits Avg Stddev &RSD	24	B_2496 9.678 {135} ppb .4551 .5617 123.4	Ba 493.409 + - - -	4934 (68) ppb 0376 0170 15.15	E 313.042	Be3130 {107} ppb .0224 .0185 82.96	Bi1902 190.241 {176} ppm .1319 .1398 106.0	Ca3179 317.933 (105) ppb .2890 1.124 388.9
⊭1 #2		.8523 .0579		0256 0496		.0092 .0355	.0331 .2307	1.084 < .0000
Elem Line Jnits Avg Stddev &RSD	22	Cd2288 8.802 (147) ppb <.0000 .0527 64.02	Cc 228.616 ( 1	2286 147) ppb 0384 0705 83.8	0 357.869 <	r3578 {94} ppb .0000 2.290 83.20	Cu3247 324.754 {103} ppb 1.442 .199 13.80	Fe2599 259.940 {129} ppb .4005 .0784 19.57
₩1 ≹2		<.0000 <.0000	<.	0000 0883	< <	.0000	1.301 1.583	.3451 .4559
lem Line Jnits Vg Stddev KSD	20	Ge2068 6.866 {162} ppm 1.402 1.417 101.0	In 230.606 {	2306 146} ppb 3227 2704 3.78	K 766.490 <	7664 { 44} ppb .0000 1.100 26.49	Li6103 610.362 { 55} ppb <.0000 1.820 167.0	Mg3838 383.826 { 87} ppb <.0000 1.945 108.8
1  2		2.404 .4005		1315 5139	< <	.0000	< .0000 .1972	<pre>&lt; .0000 &lt; .0000</pre>
lem ine Inits Nyg itddev RSD	257	Mn2576 7.610 {131} ppb <.0000 .0303 30.57	Mo 202.030 { 1 1	2020 166} ppb .035 .202 9.50	N 588.995 <	a5889 { 57} ppb .0000 1.391 12.09	Na5895 589.592 { 57} ppb <.0000 .0795 .3846	Ni2316 231.604 {145} ppb .1557 .0141 9.083
⊧1 :2		<.0000 <.0000	1	8920 .177	< <	.0000	<.0000 <.0000	.1457 .1657
lem ine Inits Nyg Itddev RSD	225	Os2255 5.585 {149} ppB <.0000 1.529 166.9	Pb 220.353 { <. 3	2203 152} ppb 0000 3421 1.97	Po 324.270 < 2	d3242 {103} ppb .0000 4519. 210.2	Pt2036 203.646 {164} ppb <.0000 4.161 98.99	Pt2144 214.423 [156] ppb .0001 .3716 366000.
1 2		.1653 < .0000	<. <.	0000	<	.000 1046.	< .0000 < .0000	<.0000 .2629

Sample Name: CCB-2 Run Time: 07/18/07 14:05

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	.2555	3.429	1.399	19.31	.2711
Stddev	.1892	.481	1.916	18.90	.0599
%RSD	74.06	14.04	137.0	97.89	22.11
#⊥	.1217	3.769	.0439	5.943	.3135
#2	.3892	3.089	2.754	32.67	.2287
Elem Line Units Avg Stddev %RSD #1 #2	Sr3464 346.446 { 97} ppb .3279 .1325 40.42 .2342 .4216	Ta2400 240.063 {140} ppb 2.228 4.317 193.7 5.280 < .0000	Te2142 214.281 {157} ppm <.0000 .5991 166.4 <.0000 .0636	Ti3361 336.121 {100} ppb <.0000 .0306 23.57 <.0000 <.0000	Tl1908 190.864 {176} ppb <.0000 .4145 16.63 <.0000
Elem	V_2924	₩_2397	Zn2138	Zr3391	<.0000
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Jnits	ppb	ppb	ppb	ppb	
Vg	<.0000	<.0000	<.0000	.3358	
Stddev	.9564	.4984	.0382	.1187	
&RSD	60.58	112.6	18.88	35.35	
1	<.0000	<.0000	<.0000	.2519	
2	<.0000	<.0000	<.0000	.4197	

Sample Name: CCV-3

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Operator:

Comment: Sun Time:	07/18/07 15:12 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
lem .ine Jnits Vyg Stddev KSD	Ag3280 328.068 {102} ppb 484.0 1.8 .3770	Al3082 308.215 {109} ppb 2175. .0187	A13961 396.152 { 85} ppm 2148. 10. .4765	As1937 193.759 {173} ppb 2083. 4. .1926	Au2427 242.795 {138} ppb <.0000 .1321 .9607
}1	485.3	2175.	2156.	2080.	<.0000
#2	482.7	2175.	2141.	2085.	<.0000
Elem Line Jnits Avg Stddev &RSD	B_2496 249.678 {135} ppb 1924. 1. .0394	Ba4934 493.409 { 68} ppb 2003. 5. .2685	Be3130 313.042 {107} ppb 2093. 1. .0544	Bi1902 190.241 {176} ppm 1.186 .047 3.932	Ca3179 317.933 {105} ppb 2116. .0066
#1	1924.	1999.	2092.	1.153	2115.
#2	1923.	2007.	2093.	1.219	2116.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 {147}	357.869 { 94}	324.754 {103}	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	2131.	2134.	1989.	1970.	2136.
Stddev	2.	7.	6.	2.	1.
&RSD	.1080	.3416	.3057	.0769	.0621
#1	2133.	2140.	1993.	1968.	2137.
#2	2129.	2129.	1984.	1971.	2135.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	10080.	2269.	2066.
Stddev	.1699	1.622	43.	30.	9.
%RSD	1.520	70.34	.4246	1.330	.4248
#1	<.0000	<pre>&lt; .0000 &lt; .0000</pre>	10110.	2291.	2073.
#2	<.0000		10050.	2248.	2060.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	2050.	2078.	1985.	2073.	2191.
Stddev	5.	42.	22.	17.	6.
%RSD	.2260	2.041	1.089	.8153	.2892
#1	2054.	2048.	2000.	2085.	2195.
#2	2047.	2108.	1970.	2061.	2186.
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 [152]	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	30.49	2199.	2556.	404.7	<.0000
Stddev	.09	6.	164.	21.4	74.79
%RSD	.3084	.2876	6.420	5.208	3.970
#1	30.55	2204.	2672.	389.6	<pre>&lt; .0000</pre>
#2	30.42	2195.	2440.	419.9	< .0000

Sample Name: CCV-3 Run Time: 07/18/07 15:12

Llem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	1968.	2096.	3974.	2126.
Stddev	.2072	82.	5.	5.	8.
≹RSD	11.67	4.183	.2248	.1365	.3835
#1	<.0000	1910.	2093.	3978.	2132.
#2	<.0000	2027.	2100.	3970.	2120.
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 (100)	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	2112.	20.39	<.0000	<.0000	2062.
Stddev	12.	4.88	2.423	.7931	4.
&RSD	.5819	23.92	.7850	26.40	.1964
₩1	2120.	16.94	<pre>&gt; 0000. &gt; &gt; 0000. &gt;</pre>	<.0000	2065.
₩2	2103.	23.84		<.0000	2059.
Elem	v 2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	2027.	<.0000	2094.	1.427	
Stddev	9.	5.500	3.	.713	
&RSD	.4203	.5739	.1440	49.93	
#1	2021.	<pre>&lt; .0000</pre>	2096.	1.931	
#2	2033.	< .0000	2092.	.9232	

1ethod: SPEX

Sample Name: CCB-3

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Operator:

Comment: Run Time:	07/18/07 15:15 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
lem	Ag3280	Al3082	Al3961	As1937	Au2427
Line	328.068 {102}	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 {138}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	.9014	8.275	<.0000	<.0000	<.0000
Stddev	.2432	1.258	3.048	.3421	.1925
&RSD	26.98	15.20	209.0	70.76	68.73
#1	1.073	7.386	< .0000	<.0000	<.0000
#2	.7294	9.165	.6971	<.0000	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Units	ppb	ppb	ppb	ppm	ppb
Avg	1.324	<.0000	<.0000	<.0000	.1445
Stddev	.386	.1765	.0202	1.865	1.124
%RSD	29.18	389.6	12.88	332.7	777.8
#1	1.597	<.0000	<.0000	< .0000	.9391
#2	1.051	.0795	<.0000	.7580	< .0000
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 {147}	357.869 { 94)	324.754 {103}	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	.0543	.1487	<.0000	<.0000	.6651
Stddev	.0527	.0176	1.832	.9935	.0675
%RSD	96.95	11.85	102.9	569.0	10.14
#1	.0916	.1362	<pre>&lt; .0000</pre>	<.0000	.7128
#2	.0171	.1612	< .0000	.5279	.6174
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	<.0000	.3466	<.0000	14.74	7.289
Stddev	.9635	.6084	1.696	.90	.390
&RSD	20.56	175.6	25.11	6.088	5.352
#1	<.0000	.7768	<pre>&lt; .0000</pre>	15.37	7.565
#2	<.0000	<.0000	< .0000	14.10	7.013
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 ( 57}	589.592 { 57}	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	2.958	3.608	<.0000	.1343
Stddev	.0026	.493	.196	.3669	.0242
%RSD	6.646	16.67	5.422	1.789	18.05
#1	<.0000	3.307	3.746	<.0000	.1514
#2	<.0000	2.610	3.469	<.0000	.1171
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 (152)	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	3370.	<.0000	1.029
Stddev	.7758	.1053	165.	9.509	.279
%RSD	150.5	3.595	4.887	38.35	27.07
#1	.0330	<.0000	3486.	<pre>0000. &gt; </pre>	.8323
#2	<.0000	<.0000	3253.		1.226

ample Name: CCB-3 Run Time: 07/18/07 15:15

:lem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
,ine	240.272 {140}	206.833 {162}	196.090 {171)	288.158 {116}	189.989 {176}
!nits	ppb	ppb	ppb	ppb	ppb
.vg	.5817	8.368	.1966	<.0000	.5167
;tddev	.1897	1.963	.6489	4.193	.0480
;RSD	32.61	23.46	330.1	47.11	9.281
⊧1	.7158	9.756	<.0000	<pre>&lt; .0000</pre>	.5506
⊧2	.4476	6.979	.6554	< .0000	.4828
llem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 (100)	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	3.656	3.876	.4023	<.0000	<.0000
Stddev	1.393	1.986	1.377	.1223	.9127
&RSD	38.10	51.24	342.3	15.30	88.92
#1	4.641	2.472	1.376	<.0000	<.0000
#2	2.671	5.281	< .0000	<.0000	<.0000
Elem	v_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	1.577	<.0000	<.0000	<.0000	
Stddev	2.232	.6492	.0260	.0587	
&RSD	141.5	67.68	3.863	6.354	
#1	< .0000	<.0000	<.0000	<.0000	
#2	3.156	<.0000	<.0000	<.0000	

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lethod: SI	PEX Sample Name:	CCV-4	Operate	pr:	
in Time:	07/18/07 16:00 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
lem	Ag3280	A13082	Al3961	As1937	Au2427
ine	328.068 (102)	308.215 (109)	396.152 { 85}	193.759 {173}	242.795 {138}
Jnits	ppb	ppb	ppm	ppb	ppb
Vyg	493.1	2156.	2069.	2021.	<.0000
Stddev	1.8	6.	6.	12.	1.001
iRSD	.3730	.2665	.2824	.5833	6.794
∦1	491.8	2160.	2073.	2013.	<pre>&lt; .0000</pre>
⊬2	494.4	2152.	2065.	2029.	< .0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Units	ppb	ppb	ppb	ppm	ppb
Avg	1917.	2074.	2060.	.8897	2025.
Stddev	5.	2.	2.	1.771	1.
%RSD	.2459	.1098	.0863	199.1	.0721
#1	1914.	2075.	2061.	2.142	2026.
#2	1920.	2072.	2058.	< .0000	2024.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 (147)	228.616 {147}	357.869 { 94}	324.754 {103}	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	2113.	2058.	1992.	2020.	2097.
Stddev	4.	5.	5.	7.	10.
%RSD	.2062	.2537	.2322	.3337	.4612
#1	2110.	2054.	1995.	2025.	2090.
#2	2116.	2062.	1988.	2016.	2104.
Elem	Ge2068	In2306	к 7664	Li6103	Mg3838
Line	206.866 {162}	230.606 (146)	766.490 (44)	610.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	9720.	1991.	2027.
Stddev	5.549	.6928	23.		15.
&RSD	22.07	103.5	.2373	.0045	.7450
#1	< .0000	<.0000	9736.	1991.	2038.
#2	< .0000	<.0000	9704.	1991.	2017.
Elem	Mn2576	Мо2020	Na5889	Na5895	Ni2316
Line	257.610 (131)	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	2010.	2047.	1824.	1868.	2110.
Stddev	1.	57.	4.	2.	8.
&RSD	.0576	2.773	.2249	.1026	.4026
#1	2010.	2007.	1821.	1867.	2104.
#2	2011.	2087.	1827.	1869.	2116.
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.505 {149]	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	30.99	2067.	4126.	406.4	<.0000
Stddev	1.65	4.	576.	16.6	128.1
%RSD	5.316	.1966	13.95	4.094	7.798
#1	32.15	2065.	4533.	418.2	< .0000
#2	29.82	2070.	3719.	394.6	< .0000

Sample Name: CCV-4 Run Time: 07/18/07 16:00

Slem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	1973.	2018.	3981.	2024.
Stddev	.1776	63.	18.	2.	5.
&RSD	6.476	3.177	.9055	.0491	.2362
#1	<.0000	1928.	2005.	3982.	2020.
≢2	<.0000	2017.	2031.	3979.	2027.
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	2043.	23.81	<.0000	<.0000	2003.
Stddev	5.	3.76	.0018	.2752	3.
&RSD	.2690	15.77	.0006	8.054	.1559
#1	2047.	21.15	<.0000	<.0000	2000.
#2	2039.	26.46	<.0000	<.0000	2005.
Elem	v 2924	₩_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	2028.	<.0000	2060.	1.217	
Stddev	2.	10.83	9.	.772	
&RSD	.0902	1.193	.4301	63.45	
#1	2026.	< .0000	2054.	.6711	
#2	2029.	< .0000	2067.	1.763	

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lethod: SP	EX Sample Name	CCB-4	Operate	or:	
Comment: Sun Tíme:	07/18/07 16:06 Type	: Unk Mode:	CONC Corr.	Fact: 1.000000	
lem	Ag3280	A13082	Al3961	As1937	Au2427
ine	328.068 {102}	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 {138}
Jnits	ppb	ppb	ppm	ppb	ppb
Vg	.3864	29.79	<.0000	.6506	<.0000
Stddev	.2424	.61	1.883	.6302	.2749
KSD	62.74	2.051	297.3	96.86	96.82
‡1	.2150	29.36	.6980	1.096	<.0000
≹2	.5578	30.22	.0000 >	.2050	<.0000
Slem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 [105]
Jnits	ppb	ppb	ppb	ppm	ppb
Avg	.5543	.0446	<.0000	.5604	1.589
Stdde⊽	.2631	.0431	.0335	1.585	1.941
≹RSD	47.46	96.76	135.8	282.9	122.2
#1	.7403	.0141	<.0000	< .0000	.2164
#2	.3683	.0750	<.0000	1.681	2.962
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 {147}	357.869 { 94)	324.754 {103}	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	.0518	<.0000	.6342	.5427
Stddev	.0351	.1248	4.009	.7448	.0936
%RSD	174.0	240.9	450.7	117.4	17.25
#1	<.0000	.1401	1.945	.1075	.6089
#2	.0046	<.0000	< .0000	1.161	.4765
Elem Line Units Avg Stddev %RSD	Ge2068 206.866 {162} ppm <.0000 3.683 1841.	In2306 230.606 {146} .3108 .5240 168.6	K_7664 766.490 { 44} ppb <.0000 .9721 22.11	Li6103 610.362 { 55} ppb 1.981 .508 25.63	Mg3838 383.826 { 87} ppb <.0000 2.141 64.84
#1	< .0000	<.0000	<.0000	1.622	< .0000
#2	2.404		<.0000	2.340	< .0000
Elem	Mn2576	Mo2020	Na5809	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Units	ppt	ppb	ppb	ppb	ppb
Avg	<.0000	4.119	8.852	<.0000	.0671
Stddev	.0134	1.016	.072	.0409	.1757
%RSD	27.65	24.67	.8140	.9269	261.7
#1	<.0000	4.838	8.903	<.0000	<.0000
#2	<.0000	3.400	8.801	<.0000	.1914
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Units	pp	ppb	ppb	ppb	ppb
Avg	.3662	<.0000	<.0000	<.0000	.6572
Stddev	.6103	.4209	2218.	14.86	.4960
&RSD	166.7	7 17.07	103.1	98.20	75.47
#1	<.000	<pre>.0000</pre> .0000	< .000	<pre>&lt; .0000</pre>	.3065
#2	.797		< .000	< .0000	1.008

Sample Name: CCB-4 Run Time: 07/18/07 16:06

Elem	Ru2402	Sb2068	Sel960	Si2881	Sn1899
Line	240.272 (140)	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	.3056	9.837	.4588	10.40	.5421
Stddev	.0715	1.692	1.020	14.69	.2516
&RSD	23.41	17.20	222.2	141.2	46.42
₩1	.2550	11.03	1.180	.0159	.3642
#2	.3561	8.641	< .0000	20.79	.7201
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 [ 97]	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	.7499	3.694	1.440	<.0000	<.0000
Stddev	2.320	2.935	.150	.5502	1.120
%RSD	309.4	79.45	10.40	54.17	381.9
#1	2.391	1.619	1.546	<.0000	< .0000
#2	< .0000	5.769	1.334	<.0000	.4985
Elem	V 2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	<.0000	<.0000	<.0000	.1257	
Stddev	1.276	1.356	.0460	.4747	
%RSD	94.26	375.9	78.69	377.6	
#1	< .0000	.5982	<.0000	.4614	
#2	< .0000	< .0000	<.0000	<.0000	

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11023010 -	· · · · · ·				
<pre>4ethod: SE Comment:</pre>	EX Sample Name:	MBLK, IS	Operat	or:	
Run Time:	07/18/07 16:13 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
llem Line Jnits Avg	Ag3280 328.068 {102} ppb <.0000	Al3082 308.215 {109} ppb 23.33 13.54	Al3961 396.152 { 85} ppm 1.584 2 510	As1937 193.759 [173] ppb .5577 .7620	Au2427 242.795 [138] ppb <.0000 .1101
Stddev	. 0000	58.05	158 5	136.6	42.25
BRSD	4.432	LU.0L	100.0	100.0	
#1 #2	<.0000 <.0000	13.76 32.91	3.359 < .0000	1.097 .0189	<.0000 <.0000
Flem	в 2496	Ba4934	Be3130	Bi1902	Ca3179
Line	$249.678$ {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Units	dqq	ppb	ppb	ppm	ppb
Ava	.0455	.1078	.0537	• .7910	. 4334
Stddev	.1054	.0038	.0817	2.097	.7152
\$RSD	231.6	3.525	152.2	265.2	165.0
01000					
#1 #2	<.0000 .1200	.1051 .1105	.1115 <.0000	2.274 < .0000	<.0000 .9392
	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Lino	228 802 (147)	228,616 {147}	357.869 { 94]	324.754 {103}	259.940 {129}
Line	220,002 (111)	daa	dqq	ppb	ppb
Durg	< 0000	.0470	1.215	1.230	.4161
Avg	.0197	.0963	2.635	1.493	.1057
SLUGEV BDCD	22.71	204.9	216.9	121.4	25.39
3K3D					
#1 #2	<.0000 <.0000	.1151 <.0000	3.077 < .0000	2.286 .1746	.4908 .3414
		T-020C	W 3664	T + 61 02	M-3030
Elem	Ge2068	1n2306	5 1004 K_ /004	CIU 3C3 ( 55)	202 026 / 071
Line	206.866 {162}	230.606 [146]	/00.490 { 44}	010.302 ( JJ)	505.020 ( 07)
Units	ppm	dqq	aqq >	ordd oor c	5 099
Avg	<.0000	.0837	1 770	2.700	3 990
Stdde⊽	1.41/	.00/6	1.//0	1.113	76 11
%RSD	58.00	80.80	44.00	40.10	/0.44
	< 0000	0250	< 0000	1 997	7 838
#1	< .0000	.0300	< 0000	3 580	2 338
#2	< .0000	·***	1.0000	5.000	21000
	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Elem	257 610 (131)	202 030 (166)	588,995 [ 57]	589,592 [ 57]	231.604 {145}
Line	237.010 [131]	(100) 202.000 (100)	daa	daa	daa
Units	244 0000 >	1,021	8.355	<.0000	. 0929
AVG	0007	004	.758	.9624	.0465
Stadev	1 162	3863	9.071	18.64	50.04
*RSD	1.102				
# <b>1</b>	<.0000	1.018	7.819	<.0000	.1257
#	<.0000	1.024	8.891	<.0000	.0600
<b>#∠</b>					
Elem	0s2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103}	203.646 (164)	214.423 {156}
Units	Bag	ppb	ppb	ppb	ppb
Ανσ	<.0000	<.0000	<.0000	<.0000	1.183
Stddev	.8011	.6317	902.6	11.29	.558
%RSD	267.5	21.02	74.00	43.34	47.15
#1	.2669	<.0000	< .0000	< .0000	.7884
#2	<.0000	<.0000	< .0000	< .0000	1.577

Sample Name: MBLK, IS Run Time: 07/18/07 16:13

	D::: 2402	CP-2068	Se1 960	Si2881	Sp1899
Siem .	240 272 {140}	206.833 {162}	196.090 {171}	288.158 [116]	189.989 {176}
Jine	daa	dqq	dqq	ppb	ppb
JAG 201	. 4269	3.755	.2403	8.907	.0508
Stddev	.5508	.519	.9580	.014	.2276
łRSD	129.0	13.83	398.6	.1542	447.6
<b>岸</b> 1	.0375	4.122	.9177	8.917	.2118
₩2	.8164	3.388	<.0000	8.897	<.0000
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 (100)	190.864 [176]
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	2.297	1.953	<.0000	<.0000	<.0000
Stddev	1.591	2.460	.5092	2140	212 5
%RSD	69.27	123.5	70.15	21.75	212.7
#1	3.421	.2139	<.0000	<.0000	.0295
#2 #2	1.172	3.693	<.0000	<.0000	<.0000
Elem	V 2924	W 2397	Zn2138	Zr3391	
Line	292.402 [115]	239.709 (140)	213.856 {157}	339.198 [ 99]	
Units	ppb	ppb	ppb	ppb	
Avg	<.0000	<.0000	<.0000	<.0000	
Stddev	.6384	.7769	.0322	.5634	
%RSD	31.46	68.67	23.24	384.2	
#1	<.0000	<.0000	<.0000	.2518	
#2	<.0000	<.0000	<.0000	<.0000	

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iethod: S	PEX Sample Name:	LCS-S,IS	Operate	or:	
Comment: Run Time:	07/18/07 16:27 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Elem	Ag3280	Al3082	Al3961	As1937	Au2427
Line	328.068 [102]	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 {138}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	338.3	25550.	26600.	581.6	<.0000
Stdde⊽	.3	165.	12.	2.2	1.260
≩RSD	.0854	.6472	.0463	.3836	3.593
#1	338.1	25430.	26590.	580.0	< .0000
#2	338.5	25660.	26610.	583.1	< .0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 [ 68}	313.042 {107}	190.241 {176}	317.933 {105}
Units	ppb	ppb	ppb	ppm	ppb
Avg	407.6	1486.	415.3	6.625	21490.
Stddev	.1	3.	1.5	.559	64.
%RSD	.0287	.2177	.3670	8.442	.2972
#1	407.6	1484.	414.3	6.229	21450.
#2	407.7	1488.	416.4	7.020	21540.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 [147]	228.616 {147}	357.869 { 94}	324.754 {103}	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	314.6	326.4	289.2	290.6	38820.
Stddev	1.9	1.7	1.4	1.4	624.
&RSD	.6091	.5331	.4704	.4921	1.606
#1	313.2	325.2	290.2	289.6	38380.
#2	315.9	327.6	288.3	291.6	39260.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	14070.	<.0000	11060.
Stddev	.3397	.6084	62.	.6450	24.
&RSD	7.572	17.03	.4433	91.69	.2157
#1	<.0000	<.0000	14030.	<.0000	11040.
#2	<.0000	<.0000	14120.	<.0000	11080.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57]	231.604 {145)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1907.	220.3	3607.	3828.	246.5
Stddev	8.	4.4	10.	31.	1.4
%RSD	.4203	2.001	.2663	.8018	.5639
#1	1901.	217.2	3601.	3806.	245.6
#2	1913.	223.4	3614.	3850.	247.5
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	496.5	582.6	<.0000	457.7	<.0000
Stddev	1.6	2.8	2220.	1.2	7.063
%RSD	.3312	.4050	293.1	.2591	5.288
#1	495.4	580.6	812.2	456.8	< .0000
#2	497.7	584.5	< .000	458.5	< .0000

ample Name: LCS-S, IS Run Time: 07/18/07 16:27

llem	Ru2402	Sb2068	Se1960	Si2001	Sn1899
Line	240.272 [140]	206.833 {162}	196.090 {171}	288.150 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	151.8	713.6	2761.	570.9
Stddev	1.580	1.1	3.3	9.	3.7
ERSD	2.816	.7356	.4585	.3088	.6414
‡1	<pre>&lt; .0000</pre>	152.6	711.3	2767.	568.3
≢2	< .0000	151.0	715.9	2755.	573.5
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	248.7	238.1	<.0000	1170.	565.2
Stddev	2.0	1.6	.8087	5.	5.1
&RSD	.8043	.6704	1.836	.3958	.9093
₽1	250.1	237.0	<.0000	1166.	561.6
#2	247.3	239.2	<.0000	1173.	568.9
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	378.0	<.0000	773.7	27.26	
Stddev	8.1	.0933	5.0	1.36	
%RSD	2.148	.0937	.6435	5.008	
#1	372.2	<.0000	770.1	26.30	
#2	383.7	<.0000	777.2	28.23	

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fethod: SPEX	Sample Name	: 07062206	60-001A,IS	Operator:
Comment: Run Time: 07/18/07	16:31 Туре	: Unk	Mode: CONC	Corr.Fact: 1.000000

lem	Ag3280	Al3082	Al3961	As1937	Au2427
Jine	328.068 {102}	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 {138}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	<.0000	8664.	8854.	2.008	<.0000
Stddev	1.093	82.	43.	.605	.2760
MRSD	33.07	.9417	.4840	30.10	1.069
╊1	< .0000	8606.	8824.	2.436	<.0000
₩2	< .0000	8722.	8884.	1.581	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Units	ppb	ppb	ppb	ppm	ppb
Avg	<.0000	32.81	<.0000	3.000	5693.
Stddev	.8698	.29	.0037	.653	31.
&RSD	2.478	.8881	.7886	21.76	.5367
#1	<.0000	32.60	<.0000	2.538	5672.
#2	<.0000	33.02	<.0000	3.461	5715.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 (147)	228.616 {147}	357.869 { 94]	324.754 {103}	259.940 {129]
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	7.271	2.248	2.466	17530.
Stddev	.1207	.015	1.132	.249	102.
&RSD	353.4	.2083	50.33	10.09	.5837
#1	<.0000	7.260	1.448	2.291	17450.
#2	.0512	7.282	3.048	2.642	17600.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	2.684	<.0000	334.3	2.102	3744.
Stddev	4.475	1.977	1.7	.287	26.
%RSD	166.7	49.25	.5123	13.66	.6963
#1	< .0000	< .0000	333.1	1.899	3726.
#2	5.848	< .0000	335.5	2.305	3763.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 (166)	588.995 { 57}	589.592 { 57}	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	167.0	3.035	517.5	518.6	8.252
Stddev	.5	1.587	1.2	1.2	.119
%RSD	.3093	52.29	.2260	.2377	1.441
#1	167.4	4.158	516.6	517.7	8.336
#2	166.7	1.913	518.3	519.5	8.168
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 (149)	220.353 (152)	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	254.6	4.047	172.7	219.8	<.0000
Stddev	2.7	.026	575.5	11.9	.8057
%RSD	1.079	.6551	333.2	5.405	6.837
#1	256.6	4.029	< .0000	228.2	<.0000
#2	252.7	4.066	579.7	211.4	<.0000

Sample Name: 070622060-001A,IS Run Time: 07/18/07 16:31

Elem	Ru2402	\$b2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 (162)	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	1.388	<.0000	1407.	17.31
Stddev	1.386	.250	1.051	23.	.47
&RSD	4.728	18.02	50.09	1.643	2.695
#1 #2	<pre>&lt; .0000 &lt; .0000</pre>	1.565 1.211	<pre>&lt; .0000 &lt; .0000 </pre>	1391. 1424.	17.64 16.98
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 [157]	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	19.74	123.0	<.0000	751.3	1.730
Stddev	1.46	.6	.8982	9.4	2.572
%RSD	7.391	.4888	74.41	1.254	148.6
#1	20.78	123.4	<.0000	744.6	3.549
#2	18.71	122.6	<.0000	757.9	< .0000
Elem	V_2924	₩_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	22.11	16.50	50.98	4.830	
Stddev	3.83	.49	.09	.475	
%RSD	17.32	2.954	.1806	9.840	
#1	19.40	16.16	50.91	5.166	
#2	24.81	16.85	51.04	4.494	

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Method: S	PEX Sampl	e Name:	070622060-002A	,IS Opera	tor:	
Run Time:	07/18/07 16:3	6 Type:	Unk Mode:	CONC Corr	.Fact: 1.000000	
Elem	328.068	Ag3280	Al3082	Al3961	As1937	Au2427
Line		{102}	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 {138}
Units		ppb	ppb	ppm	ppb	ppb
Avg		<.0000	13190.	13870.	.1304	<.0000
Stddev		.2428	38.	18.	.3675	.3545
%RSD		6.082	.2880	.1324	281.9	.9222
#1		<.0000	13160.	13890.	<.0000	<.0000
#2		<.0000	13210.	13860.	.3902	<.0000
Elem	249.678	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line		{135}	493.409 { 68)	313.042 {107}	190.241 (176)	317.933 {105}
Units		ppb	ppb	ppb	ppm	ppb
Avg		<.0000	48.31	<.0000	1.681	8809.
Stddev		.0484	.15	.0056	.093	18.
&RSD		.0886	.3118	4.357	5.564	.2001
#1		<.0000	48.21	<.0000	1.747	8797.
÷2		<.0000	48.42	<.0000	1.615	8822.
Elem	228.802	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line		{147}	228.616 {147}	357.869 { 94]	324.754 {103}	259.940 {129}
Units		ppb	ppb	ppb	ppb	ppb
Avg		<.0000	10.18	9.927	4.894	25760.
Stddev		.0000	.09	2.132	.597	320.
&RSD		.0196	.9138	21.48	12.20	1.243
#1		<.0000	10.25	8.419	5.317	25530.
#2		<.0000	10.12	11.43	4.472	25990.
Elem	206.866	Ge2068	In2306	K_7664	Li6103	Mg3838
Line		{162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units		ppm	ppb	ppb	ppb	ppb
Avg		4.886	<.0000	547.0	7.191	6703.
Stddev		2.607	.7603	2.9	1.484	16.
%RSD		53.35	20.01	.5241	20.64	.2392
#1		6.729	<.0000	545.0	8.240	6691.
#2		3.043	<.0000	549.0	6.142	671 <b>4</b> .
Elem	257.610	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line		{131}	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Units		ppb	ppb	ppb	ppb	ppb
Avg		304.4	.6696	733.9	741.9	13.88
Stddev		.6	.0814	.3	2.0	.09
&RSD		.1896	12.16	.0468	.2675	.6615
#1		304.0	.6120	734.1	740.5	13.82
#2		304.8	.7272	733.7	743.3	13.95
Elem	225.585	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line		{149}	220.353 {152}	324.270 {103}	203.646 [164]	214.423 {156}
Units		ppB	ppb	ppb	ppb	ppb
Avg		382.7	8.857	<.0000	285.0	<.0000
Stddev		.6	.118	657.7	7.8	.7423
%RSD		.1646	1.328	56.48	2.720	4.643
#1		382.3	8.774	< .0000	290.5	<.0000
#2		383.2	8.941	< .0000	279.5	<.0000

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Sample Name: 070622060-002A, IS Run Time: 07/18/07 16:36

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	2.272	<.0000	1532.	17.14
Stddev	.2869	.578	.4634	11.	.06
&RSD	.6598	25.42	10.45	.6877	.3575
₩1	<.0000	2.681	<.0000	1539.	17.19
₩2	<.0000	1.864	<.0000	1525.	17.10
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	28.47	182.1	1.143	792.4	<.0000
Stddev	3.05	3.6	.209	3.3	.5397
&RSD	10.72	1.961	18.33	.4151	15.86
#1	26.31	179.5	1.291	790.1	<.0000
#2	30.62	184.6	.9952	794.8	<.0000
Elem	V_2924	₩_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	12.52	23.65	72.51	7.603	
Stddev	.16	.44	.14	.297	
&RSD	1.276	1.872	.1938	3.906	
#1 #2	12.63 12.41	23.97 23.34	72.41 72.61	7.393	

Analysis Report

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1.000000

Method: SPEX Comment:	Sample Name:	070622060-003A,IS	Operator:
Run Time: 07/18/07	16:40 Type:	Unk Mode: CONC	Corr.Fact:
Elem	Aq3280	A13082	212061

Elem Line	Ag3280 328.068 {102}	A13082 308.215 (109)	Al3961 396.152 { 85}	As1937	Au2427
Units Avg	ppb <.0000.>	ppb 8343.	ppm 8525.	ppb .9858	ppb <_0000
€RSD	2.125 82.52	19. .2311	27. .3139	.3155 32.01	.6219 2.169
#1 #2	<pre>&lt; .0000 &lt; .0000</pre>	8330. 8357.	8506. 8543.	.7627 1.209	<.0000 <.0000
Elem Line	B_2496 249.678 {135}	Ba4934 493.409 { 68}	Be3130	Bi1902	Ca3179
Units Avg	ppb 2000.>	ppb 30.92	ppb <.0000	190-241 (178) ppm 792 5	317.933 {105} ppb
Stddev %RSD	.5969 1.502	.18 .5912	.0074	1.259 38.18	6993. 36. 5187
#1 #2	<.0000	30.79	<.0000	4.187	6967.
π∠ Flom	<.0000	31.05	<.0000	2.407	7019.
Line	228.802 {147}	Co2286 228.616 {147}	Cr3578 357.869 { 94}	Cu3247 324.754 {103}	Fe2599 259.940 {129}
Avg	2980 .2980	ppb 7.761	ppb 1.815	ppb 4.929	ppb 18880.
BRSD	21.36	.133 1.714	.528 29.10	.340 7.063	318. 1.684
₩1 ¥2	.3430 .2529	7.667 7.855	1.442 2.189	4.683 5.176	18660. 19100.
lem Jine	Ge2068	In2306	K_7664	Li6103	Mg3838
Jnits	200.000 (102) ppm	230-606 (146) ppb	766.490 (44) ppb	610.362 { 55} ppb	383.826 { 87}
Stddev	3.765	<.0000 .7436	393.9 1.2	1.105 .701	3523.
1	99.27	19.88	.2975	63.47	.1861
<sup>1</sup> 2	6.409	<.0000 <.0000	393.1 394.7	1.601 .6091	3519. 3528.
lem ine	Mn2576 257.610 (131)	Mo2020	Na5889	Na5895	Ni2316
nits va	ppb	ppb	ppb	589.592 ( 57} ppb	231.604 {145} ppb
itddev RSD	-4	.4329	506.8 1.0	506.9 _8	9.445 .020
1	.2401	10.29	.2012	-1629	.2134
2	162.4	.4199	506.1 507.5	506.3 507.5	9.459 9.430
lem ine	Os2255 225 585 (149)	Pb2203	Pd3242	Pt2036	Pt2144
nits	ppB	220.333 (152) ppb	524.270 {103} ppb	203.646 {164} ppb	214.423 {156} ppb
tddev	1.4	5.834 -421	347.1 1644.	224.5 22.0	<.0000
1	.5013	7.217	473.8	9.798	1.448
2	276.3	6.132 5.536	< .000 1510.	240.0 208.9	<.0000 <.0000

,

Sample Name: 070622060-003A,IS Run Time: 07/18/07 16:40

llem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	2.368	<.0000	1308.	18.36
Stddev	.5329	.327	.5254	21.	.18
ARSD	1.638	13.82	27.01	1.605	.9780
}1	<.0000	2.599	<.0000	1293.	18.49
}2	<.0000	2.136	<.0000	1322.	18.24
llem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 [140}	214.281 {157}	336.121 {100}	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	20.26	137.3	<.0000	729.8	<.0000
Stddev	2.98	2.5	.4791	6.1	.1659
&RSD	14.73	1.823	55.17	.8322	4.252
#1	22.37	139.1	<.0000	725.5	<.0000
#2	18.15	135.6	<.0000	734.1	<.0000
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	19.85	16.35	50.58	3.822	
Stddev	1.59	.41	.14	.238	
&RSD	8.034	2.482	.2726	6.219	
분1	18.72	16.63	50.48	3.990	
# 2	20.98	16.06	50.68	3.654	

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ieth	nod: S	PEX	Sample	Name:	070622060-004A,IS	
Com	aent:					
۲un	Time:	07/18/07	16:44	Type:	Unk	Mode: CONC

Corr.Fact: 1.000000

Operator:

llem	Ag3280	Al3082	A13961	As1937	Au2427
Line	328.068 {102}	308.215 {109}	396.152 { 85}	193.759 (173)	242.795 {138}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	<.0000	15010.	15890.	.2976	<.0000
Stddev	1.821	52.	51.	.0262	.4345
&RSD	28.10	.3492	.3191	8.819	.8253
#1	<pre>&lt; .0000</pre>	14970.	15860.	.2791	<.0000
₩2	< .0000	15050.	15930.	.3162	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Units	ppb	ppb	ppb	ppm	ppb
Avg	<.0000	84.12	<.0000	6.527	8028.
Stddev	.0091	.38	.0074	.233	36.
&RSD	.0120	.4520	2.391	3.571	.4441
₽1	<.0000	83.85	<.0000	6.362	8002.
#2	<.0000	84.39	<.0000	6.692	8053.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 {147}	357.869 { 94)	324.754 {103}	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	12.48	3.852	3.135	34430.
Stddev	.0856	.07	.124	.697	69.
%RSD	58.67	.5874	3.225	22.22	.1998
#1	<.0000	12.53	3.940	2.642	34380.
#2	<.0000	12.43	3.764	3.628	34470.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Líne	206.866 {162}	230.606 (146)	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	4.005	<.0000	546.4	7.835	7290.
Stddev	4.417	.1691	1.0	1.566	6.
%RSD	110.3	3.793	.1758	19.98	.0771
#1	.8814	<.0000	547.0	6.728	7286.
#2	7.128	<.0000	545.7	8.942	7294.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57]	589.592 { 57}	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	337.9	.4089	657.7	660.2	11.97
Stddev	.0	.2950	3.0	.6	.07
%RSD	.0091	72.13	.4603	.0933	.6080
#1	337.9	.2004	655.6	660.6	12.02
#2	337.9	.6175	659.9	659.7	11.92
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	529.4	4.903	3138.	437.5	<.0000
Stddev	.4	.184	493.	11.9	.7433
&RSD	.0797	3.757	15.72	2.717	3.108
#1	529.1	5.033	3487.	429.1	<.0000
#2	529.7	4.773	2789.	445.9	<.0000

Sample Name: 070622060-004A,IS Run Time: 07/18/07 16:44

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	2.667	<.0000	1419.	17.43
Stddev	1.107	.981	.8963	2.	.13
&RSD	1.939	36.80	19.25	.1477	.7563
#1	<pre>&lt; .0000 &lt; .0000 &lt; .0000</pre>	1.973	<.0000	1418.	17.53
#2		3.361	<.0000	1421.	17.34
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 (140)	214.281 (157)	336.121 (100)	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	59.61	247.3	<.0000	811.8	<.0000
Stddev	.13	1.1	.2396	3.4	.3318
&RSD	.2223	.4535	75.41	.4217	18.55
#1	59.52	246.5	<.0000	809.3	<.0000
#2	59.70	248.1	<.0000	814.2	<.0000
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 (140)	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	21.66	31.73	79.02	6.174	
Stddev	1.59	.03	.01	.059	
&RSD	7.366	.1091	.0114	.9619	
#1	20.53	31.70	79.02	6.132	
⊮2	22.78	31.75	79.01	6.216	

Method: SI	PEX Sample Name:	070622060-005A	,IS Operat	or:	
Comment: Run Time:	07/18/07 16:51 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Elem	Ag3280	A13082	A13961	As1937	Au2427
Line	328.068 {102}	308.215 (109)	396.152 { 85}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppm	ppb	ppb
Avg	<.0000	16100.	17180.	1.023	<.0000
Stddev	2.125	73.	13.	.578	.3103
&RSD	42.67	.4524	.0739	56.50	.8484
#1	< .0000	16150.	17190.	.6141	<.0000
#2	< .0000	16040.	17170.	1.431	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Units	ppb	ppb	ppb	ppm	ppb
Avg	<.0000	42.77	.0425	5.769	11210.
Stddev	.0219	.04	.0130	2.332	33.
%RSD	.0429	.0992	30.59	40.42	.2943
₩1	<.0000	42.80	.0333	7.417	11190.
#2	<.0000	42.74	.0517	4.120	11240.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147)	228.616 {147}	357.869 { 94}	324.754 {103}	259.940 [129]
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	9.088	4.926	2.536	24440.
Stddev	.0264	.073	1.516	.149	190.
%RSD	10.18	.8001	30.77	5.891	.7757
#1	<.0000	9.139	5.998	2.431	24300.
#2	<.0000	9.036	3.854	2.642	24570.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	.6808	<.0000	724.7	<.0000	4922.
Stddev	2.547	1.369	3.5	.7602	12.
&RSD	374.1	42.43	.4878	36.94	.2389
#1	< .0000	<pre>&lt; .0000</pre>	727.2	<.0000	4931.
#2	2.482	< .0000	722.2	<.0000	4914.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	227.8	.3705	1371.	1387.	9.194
Stddev	.5	.1319	4.	5.	.120
&RSD	.2010	35.61	.3149	.3682	1.305
#1	227.5	.2772	1374.	1390.	9.279
#2	228.1	.4638	1368.	1383.	9.109
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103}	203.646 {164)	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	364.5	5.778	<.0000	287.5	<.0000
Stddev	.2	.185	246.7	.6	.4039
&RSD	.0472	3.199	60.39	.1974	2.502
#1	364.6	5.908	< .0000	287.1	<.0000
#2	364.4	5.647	< .0000	287.9	<.0000

ample Name: 070622060-005A,IS Run Time: 07/18/07 16:51

lem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Jine	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Vg	<.0000	1.293	<.0000	8396.	17.67
Iddev	.2219	1.116	.8035	27.	.51
RSD	.5631	86.32	23.87	.3230	2.906
1	<.0000	.5036	<.0000	8416.	17.31
2	<.0000	2.082	<.0000	8377.	18.03
lem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 [140]	214.281 {157}	336.121 {100}	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	46.24	173.4	<.0000	572.1	<.0000
Stddev	.07	1.2	1.946	4.0	1.867
&RSD	.1457	.7052	124.2	.7033	46.81
#1.	46.19	174.2	< .0000	574.9	< .0000
#2	46.29	172.5	< .0000	569.3	< .0000
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Jnits	ppb	ppb	ppb	ppb	
Avg	10.94	21.66	63.07	6.804	
Stddev	.80	1.10	.24	.297	
&RSD	7.293	5.076	.3830	4.367	
∯1	10.38	20.88	62.90	6.594	
#2	11.50	22.44	63.24	7.014	

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Analysis Report		0771	5/07 17:01:50	page	•
Aethod: SPEX	Sample Name:	070622060-006A	,IS Operat	or:	
Run Time: 07/18/	07 16:58 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Elem	Ag3280	Al3082	Al3961	As1937	Au2427
Line	328.068 {102}	308.215 (109)	396.152 { 85}	193.759 {173}	242.795 {138}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	<.0000	14970.	16120.	1.302	<.0000
Stddev	.1214	34.	2.	1.394	.2399
≹RSD	3.179	.2257	.0097	107.1	.5665
#1	<.0000	14950.	16120.	.3161	<.0000
#2	<.0000	15000.	16120.	2.287	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Units	ppb	ppb	ppb	ppm	ppb
Avg	<.0000	50.12	<.0000	4.879	8195.
Stddev	.3278	.12	.0334	1.539	19.
%RSD	.5069	.2313	4.037	31.54	.2353
#1	<.0000	50.04	<.0000	3.791	8181.
#2	<.0000	50.20	<.0000	5.967	8208.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 {147}	357.869 { 94}	324.754 {103}	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	9.840	3.992	2.009	30540.
Stddev	.0329	.017	3.955	.597	422.
&RSD	16.84	.1743	99.08	29.72	1.381
#1	<.0000	9.852	6.788	2.431	30240.
#2	<.0000	9.828	1.195	1.587	30840.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	3.124	<.0000	501.1	<.0000	3776.
Stddev	2.719	1.707	1.5	.3927	9.
&RSD	87.04	24.79	.3051	5.484	.2379
#1	1.201	< .0000	500.1	<.0000	3770.
#2	5.047	< .0000	502.2	<.0000	3782.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 (166)	588.995 { 57}	589.592 { 57}	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	348.6	.3815	1535.	1548.	8.323
Stddev	.3	.1087	2.	5.	.027
%RSD	.0931	28.49	.1582	.3362	.3204
#1	348.4	.3046	1533.	1544.	8.304
#2	348.9	.4583	1536.	1551.	8.342
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 (152)	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	467.2	.4932	3312.	392.2	<.0000
Stddev	2.1	.0527	1398.	14.2	1.364
%RSD	.4587	10.68	42.20	3.633	6.046
#1	468.8	.4559	4301.	402.2	<pre>&lt; .0000 &lt; .0000</pre>
#2	465.7	.5304	2324.	382.1	

#2

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ample Name: 070622060-006A,IS Run Time: 07/18/07 16:58

lem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
ine	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	169.989 {176}
'nits	ppb	ppb	ppb	ppb	ppb
.vg	<.0000	2.027	<.0000	6964.	16.53
:tddev	.7006	.885	.1856	34.	.26
.RSD	1.484	43.67	4.203	.4822	1.590
1	<.0000	1.401	<.0000	6960.	16.71
2	<.0000	2.654	<.0000	7008.	16.34
lem	Sr3464	Ta2400	Te2142	Ti3361	T11908
,ine	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Inits	ppb	ppb	ppm	ppb	ppb
Avg	46.99	214.5	<.0000	1374.	<.0000
;tddev	1.66	6.1	.9584	7.	1.950
BRSD	3.529	2.862	55.88	.5326	43.17
↓1	45.82	210.2	<.0000	1369.	<pre>&lt; .0000</pre>
¢2	48.17	218.9	<.0000	1380.	< .0000
lem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Jnits	ppb	ppb	ppb	ppb	
Avg	16.47	28.86	56.09	37.20	
Stddev	5.42	.84	.05	.62	
&RSD	32.94	2.928	.0922	1.678	
₿1	20.30	29.46	56.05	36.76	
∦2	12.63	28.26	56.12	37.64	

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dethod: S	PEX Sample Name:	070622060-007A	,IS Operat		
Comment: Run Time:	07/18/07 17:02 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Llem	Ag3280	A13082	Al3961	As1937	Au2427
Line	328.068 {102}	308.215 (109)	396.152 { 85}	193.759 (173)	242.795 (138)
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	<.0000	19000.	19990.	.8922	<.0000
Stddev	.1214	140.	6.	.5521	.6713
≩RSD	3.408	.7395	.0291	61.88	2.286
⊭1	<.0000	18900.	20000.	.5018	<.0000
⊭2	<.0000	19100.	19990.	1.283	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 [ 68]	313.042 {107}	190.241 {176}	317.933 {105}
Jnits	ppb	ppb	ppb	ppm	ppb
Avg	<.0000	32.59	.0622	4.087	12980.
Stddev	.1405	.04	.0037	1.538	14.
&RSD	.3531	.1329	5.968	37.64	.1114
#1	<.0000	32.56	.0648	2.999	12970.
#2	<.0000	32.62	.0596	5.175	12990.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 {147}	357.869 { 94}	324.754 (103)	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	8.570	6.849	3.909	19380.
Stddev	.0154	.079	5.699	.995	212.
&RSD	18.34	.9179	83.21	25.46	1.095
#1	<.0000	8.626	2.819	4.613	19230.
#2	<.0000	8.515	10.88	3.205	19530.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 [ 87]
Units	ppm	ppb	ppb	ppb	ppb
Avg	2.282	<.0000	520.5	<.0000	3955.
Stddev	1.189	.8450	1.2	.7310	2.
%RSD	52.11	35.53	.2352	6.821	.0545
#1	3.123	<.0000	519.6	<.0000	3957.
#2	1.441	<.0000	521.4	<.0000	3954.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 (166)	588.995 { 57}	589.592 (57)	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	140.5	2.634	2017.	2071.	11.76
Stddev	.0	.050	2.	12.	.25
&RSD	.0119	1.915	.1033	.5728	2.148
#1	140.5	2.670	2018.	2063.	11.93
#2	140.5	2.599	2016.	2079.	11.58
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	281.2	1.396	2382.	230.7	<.0000
Stddev	.9	.566	1891.	19.0	1.177
%RSD	.3346	40.54	79.39	8.243	8.868
#1	281.9	.9955	1045.	217.3	<pre>&lt; .0000</pre>
#2	280.5	1.796	3719.	244.2	< .0000

Sample Name: 070622060-007A,IS Run Time: 07/18/07 17:02

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	1.293	<.0000	7519.	16.47
Stddev	.4440	.500	.5563	13.	.05
%RSD	1.384	38.71	33.49	.1673	.2907
#1	<.0000	.9388	<.0000	7510.	16.51
#2	<.0000	1.646	<.0000	7528.	16.44
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	65.61	143.1	<.0000	377.9	<.0000
Stddev	.93	6.2	.7487	3.7	.1244
&RSD	1.416	4.345	76.87	.9789	3.657
#1	66.27	138.7	<.0000	375.3	<.0000
#2	64.96	147.5	<.0000	380.5	<.0000
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99]	
Units	ppb	ppb	ppb	ppb	
Avg	3.157	16.65	42.17	4.641	
Stddev	.319	.32	.03	.089	
&RSD	10.10	1.950	.0821	1.920	
#1	3.383	16.42	42.14	4.578	
#2	2.932	16.88	42.19	4.704	

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Method: SPEX Sample Name: 070622060-008A, IS Operator:

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Comment: Run Time:	07/18/07 17:10 Type	: Unk Mode:	CONC Corr.	Fact: 1.000000	
Elem	Ag3280	A13082	Al3961	As1937	Au2427
Line	328.068 {102}	308.215 (109)	396.152 { 85}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppm	ppb	ppb
Avg	<.0000	13960.	14650.	<.0000	<.0000
Stddev	.6071	31.	7.	.6050	.0144
&RSD	18.86	.2203	.0506	271.5	.0429
#1	<.0000	13940.	14660.	.2050	<.0000
#2	<.0000	13990.	14650.	<.0000	<.0000
Elem	B_2496	Ba4934	Be3130	Bil902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Units	ppb	ppb	ppb	ppm	ppb
Avg	<.0000	38.89	<.0000	3.659	12430.
Stddev	.0816	.10	.0371	.932	15.
%RSD	.1808	.2647	8.558	25.47	.1241
#1	<.0000	38.96	<.0000	3.000	12420.
⋕2	<.0000	38.82	<.0000	4.318	12440.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 {147}	357.869 [ 94}	324.754 {103}	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	9.774	7.603	2.959	21520.
Stddev	.1514	.112	.611	.050	270.
&RSD	122.0	1.144	8.029	1.676	1.255
#1	<.0000	9.853	8.035	2.994	21330.
#2	<.0000	9.695	7.172	2.924	21710.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Onits	ppm	ppb	ppb	ppb	ppb
Avg	2.764	<.0000	660.5	<.0000	5217.
Stddev	.511	.5918	3.3	1.308	10.
&RSD	18.48	12.02	.4974	32.04	.1963
#1	3.125	<.0000	658.2	<pre>&lt; .0000</pre>	5210.
#2	2.402	<.0000	662.9	< .0000	5225.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166)	588.995 ( 57)	589.592 { 57}	231.604 (145)
Units	ppb	ppb	ppb	ppb	ppb
Avg	176.4	.4638	1214.	1230.	11.28
Stddev	.1	.0233	2.	5.	.06
%RSD	.0731	5.014	.1958	.3802	.4895
#1	176.3	.4474	1212.	1227.	11.32
#2	176.5	.4802	1215.	1234.	11.24
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	314.2	2.559	579.6	246.7	<.0000
Stddev	.3	.158	164.5	25.0	.5892
%RSD	.1106	6.181	28.38	10.13	4.120
#1	314.4	2.670	695.9	264.4	<.0000
#2	314.0	2.447	463.3	229.1	<.0000
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Sample Name: 070622060-008A,IS Run Time: 07/18/07 17:10

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 (140)	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	1.674	<.0000	7462.	24.50
Stddev	.4302	.385	.9890	12.	.38
%RSD	1.186	23.01	34.28	.1666	1.570
#1	<.0000	1.946	<.0000	7471.	24.78
#2	<.0000	1.401	<.0000	7454.	24.23
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 (176)
Units	ppb	ppb	ppm	ppb	ppb
Avg	40.71	151.6	<.0000	879.0	<.0000
Stddev	2.19	7.2	.7484	.2	.2070
&RSD	5.379	4.762	110.5	.0220	4.901
#1	39.16	156.7	<.0000	879.2	<.0000
#2	42.26	146.5	<.0000	878.9	<.0000
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 [115]	239.709 {140}	213.856 {157}	339.198 { 99}	
Jnits	ppb	ppb	ppb	ppb	
Avg	10.38	18.32	57.46	6.469	
Stddev	_96	.40	.02	.357	
&RSD	9.222	2.158	.0273	5.513	
}1	11.05	18.60	57.44	6.216	
‡2	9.700	18.04	57.47	6.721	

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iethod: Sl	PEX Sample Name:	CCV-5	Operat	or:	
lomment: Run Time:	07/18/07 17:14 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
lem	Ag3280	A13082	Al3961	As1937	Au2427
Jine	328.068 {102}	308.215 (109)	396.152 { 85}	193.759 (173)	242.795 {138}
Jnits	ppb	ppb	ppm	ppb	ppb
Vg	490.3	2167.	2102.	2029.	<.0000
Stddev	3.0	2.	16.	4.	.0827
SRSD	.6105	.0855	.7589	.1947	.6010
ዛ1	492.5	2166.	2114.	2032.	<.0000
ዙ2	489.2	2169.	2091.	2026.	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 [135]	493.409 { 68}	313.042 {107}	190.241 (176)	317.933 {105}
Jnits	ppb	ppb	ppb	ppm	ppb
Avg	1928.	2072.	2052.	<.0000	2038.
Stdde⊽	7.	2.	2.	1.119	9.
&RSD	.3436	.1083	.0951	57.52	.4000
#1	1932.	2074.	2050.	<pre>&lt; .0000 &lt; .0000</pre>	2044.
#2	1923.	2070.	2053.		2032.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 (147)	228.616 (147)	357.869 { 94}	324.754 (103)	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	2131.	2075.	2012.	2031.	2117.
Stddev	9.	11.	11.	7.	12.
&RSD	.4103	.5294	.5504	.3542	.5786
#1	2137.	2083.	2020.	2036.	2126.
#2	2125.	2067.	2004.	2026.	2108.
Elem Line Units Avg Stddev %RSD	Ge2068 206.866 {162} ppm <.0000 2.888 10.91	In2306 230.606 {146} ppb <.0000 1.301 92.28	K_7664 766.490 { 44) 9855. 23. .2347	Li6103 610.362 { 55} ppb 2029. 15. .7386	Mg3038 383.026 { 87} ppb 2048. 5. .2338
#1 #2	<pre>&lt; .0000 &lt; .0000</pre>	<pre>&lt; .0000 &lt; .0000</pre>	9872. 9839.	2039. 2018.	2044. 2051.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 [166]	588.995 { 57}	589.592 { 57}	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	2031.	2046.	1847.	1871.	2123.
Stddev	10.	38.	8.	5.	9.
%RSD	.5129	1.846	.4288	.2668	.4317
#1	2038.	2019.	1853.	1875.	2130.
#2	2024.	2073.	1842.	1868.	2117.
Elem Line Units Avg Stddev %RSD	Os2255 225.585 {149} ppB 31.97 .12 .3676	Pb2203 220.353 {152} ppb 2092. 8. .4047 2098	Pd3242 324.270 {103} ppb 2556. 493. 19.30 2208.	Pt2036 203.646 {164} ppb 389.6 3.6 .9163 387.1	Pt2144 214.423 {156} ppb <.0000 46.75 2.541 < .0000
サム 単つ	31.88	2005.	2905.	392.1	< .0000

Sample Name: CCV-5 Run Time: 07/18/07 17:14

llem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Jaits	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	1964.	2036.	3979.	2044.
Stddev	.2249	84.	5.	29.	11.
SRSD	7.042	4.259	.2529	.7355	.5200
‡1	<.0000	1904.	2032.	3959.	2052.
≩2	<.0000	2023.	2039.	4000.	2037.
llem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 [140]	214.281 {157}	336.121 (100)	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	2059.	22.71	<.0000	<.0000	2016.
Stddev	8.	2.89	1.075	.1836	10.
&RSD	.3870	12.73	.3504	5.623	.5174
₩1	2065.	20.66	<pre>&lt; .0000</pre>	<.0000	2024.
₩2	2054.	24.75	< .0000	<.0000	2009.
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 [115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Onits	ppb	ppb	ppb	ppb	
Avg	2031.	<.0000	2074.	1.973	
Stddev	4.	6.576	8.	.238	
%RSD	.2005	.7068	.3886	12.04	
#1	2028.	< .0000	2080.	1.805	
#2	2033.	< .0000	2068.	2.141	

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lethod: Si	PEX Sample Name:	CCB-5	Operato	or:	
Comment: Run Time:	07/18/07 17:23 Type:	Unk Mode:	CONC Corr.1	Fact: 1.000000	
lem	Ag3280	A13082	Al3961	As1937	Au2427
ine	328.068 [102]	308.215 [109]	396.152 { 85}	193.759 {173}	242.795 {138}
Inits	ppb	ppb	ppm	ppb	ppb
lvg	<.0000	7.812	<.0000	<.0000	<.0000
Stddev	1.274	1.974	.9860	.4734	.3630
!RSD	297.0	25.27	59.83	77.02	143.7
ŧ1.	.4720	6.416	<.0000	<.0000	.0041
∔2	< .0000	9.208	<.0000	<.0000	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 [135]	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Jnits	ppb	ppb	ppb	ppm	ppb
Avg	8.451	<.0000	<.0000	<.0000	1.878
Stddev	.167	.1263	.0001	1.119	.919
%RSD	1.978	61.88	.0974	50.65	48.95
#1	8.569	<.0000	<.0000	<pre>&lt; .0000</pre>	2.528
#2	8.333	<.0000	<.0000	< .0000	1.228
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 {147}	357.869 { 94}	324.754 (103)	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	.1878	.0556	<.0000	.3879	.9717
Stddev	.0307	.0543	.9157	.0012	.0272
%RSD	16.36	97.53	70.71	.3077	2.798
#1	.1660	.0940	<.0000	.3871	.9524
#2	.2095	.0173	<.0000	.3888	.9909
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	26.98	2.750
Stddev	.5102	.1013	1.805	.80	1.361
&RSD	25.96	7.248	32.45	2.967	49.51
#1	<.0000	<.0000	< .0000	26.42	1.787
#2	<.0000	<.0000	< .0000	27.55	3.713
Elem	Mn2576	Mo2020	Na5889	Na5895	N12316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	.1047	4.653	25.68	<.0000	.0086
Stddev	.0125	.120	.19	.2897	.2464
%RSD	11.90	2.590	.7505	3.148	2857.
#1	.1135	4.739	25.81	<.0000	.1828
#2	.0959	4.568	25.54	<.0000	<.0000
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 [149]	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	.4359	<.0000	<.0000	<.0000	.1529
Stddev	.0464	.3946	81.37	2.972	2.818
%RSD	10.64	19.55	7.366	9.822	1843.
#1	.4686	<.0000	< .0000	<pre>&lt; .0000</pre>	2.146
#2	.4031	<.0000	< .0000	< .0000	< .0000

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Sample Name:	CCB-5	Run Time:	07/18/07	17:23	
		P112402	9	552068	s

llem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	2.884	.8734	8.920	.2032
Stddev	.4023	.789	1.298	4.211	.1557
KRSD	35.71	27.36	148.6	47.21	76.61
81	<.0000	3.441	< .0000	5.942	.0931
82	<.0000	2.326	1.791	11.90	.3133
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97]	240.063 {140}	214.281 {157}	336.121 (100)	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	4.453	1.925	3.176	<.0000	<.0000
Stddev	1.327	4.488	.389	.1221	.2076
&RSD	29.79	233.1	12.25	8.968	9.077
#1	3.515	5.099	2.901	<.0000	<.0000
#2	5.391	< .0000	3.451	<.0000	<.0000
Elem	V_2924	₩ 2397	Zn2138	Zr3391	
Line	292.402 {115)	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	<.0000	<.0000	.1490	<.0000	
Stddev	1.595	.9040	.0703	.5043	
&RSD	192600.	186.7	47.20	126.4	
#1	1.127	<.0000	.0993	<.0000	
#2	< .0000	.1551	.1988	<.0000	

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iethod: SI	PEX Sample	e Name:	070622060-009A	,IS Operat	cor:	
lomment: Run Time:	07/18/07 17:20	5 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Elem Line Jnits Avg Stddev &RSD	328.068	Ag3280 {102} ppb .0000 1.336 34.20	Al3082 308.215 {109} ppb 14610. 173. 1.186	Al3961 396.152 { 85} ppm 15570. 26. .1678	As1937 193.759 {173} ppb 2.547 1.315 51.61	Au2427 242.795 {138} ppb <.0000 .6664 1.674
#1	< <	.0000	14490.	15550.	1.618	<.0000
₩2		.0000	14740.	15590.	3.477	<.0000
Slem Line Jnits Avg Stddev &RSD	249.678	3_2496 {135} ppb <.0000 .7291 1.315	Ba4934 493.409 { 68] ppb 37.26 .23 .6165	Be3130 313.042 {107} ppb .0635 .0390 61.36	Bi1902 190.241 {176} ppm 6.263 1.539 24.56	Ca3179 317.933 {105} ppb 8711. 28. .3189
#1		<.0000	37.10	.0911	5.175	8691.
#2		<.0000	37.43	.0360	7.351	8730.
Elem Line Jnits Avg Stddev ≹RSD	( 228-802	Cd2288 {147} ppb .0000 .0790 42.07	Co2286 228.616 {147} ppb 10.73 .04 .3526	Cr3578 357.869 { 94} ppb 5.029 2.614 51.98	Cu3247 324.754 [103] ppb 1.622 1.045 64.39	Fe2599 259.940 {129} ppb 26610. 660. 2.481
#1	•	<.0000	10.75	6.877	.8837	26140.
#2		<.0000	10.70	3.180	2.361	27070.
Elem Line Units Avg Stddev %RSD	( 206.866	Ee2068 {162} ppm 4.446 3.002 67.52	In2306 230.606 {146} ppb <.0000 .4225 11.40	K_7664 766.490 { 44} ppb 603.1 2.1 .3508	Li6103 610.362 { 55} ppb .3584 .5898 164.5	Mg3838 383.826 { 87} ppb 5551. 20. .3690
#1		2.323	<.0000	601.7	.7755	5537.
÷2		6.569	<.0000	604.6	<.0000	5566.
Elem	257.610	In2576	Mo2020	Na5889	Na5895	Ni2316
Line		{131}	202.030 [166]	588.995 { 57}	589.592 { 57}	231.604 {145}
Jnits		ppb	ppb	ppb	ppb	ppb
Avg		224.0	4.575	1166.	1176.	11.79
Stddev		.9	.924	4.	8.	.16
&RSD		.3881	20.19	.3650	.7063	1.318
#1		223.4	5.228	1163.	1170.	11.90
#2		224.6	3.922	1169.	1181.	11.68
Elem	225.585	0s2255	Pb2203	Pd3242	Pt2036	Pt2144
Line		{149}	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Jnits		ppB	ppb	ppb	ppb	ppb
Avg		400.3	2.959	1452.	334.2	<.0000
Stddev		.1	.697	247.	2.4	1.797
%RSD		.0191	23.57	17.00	.7133	9.720
∄1		400.2	2.466	1277.	332.5	< .0000
#2		400.3	3.452	1626.	335.8	< .0000

ample Name: 070622060-009A,IS Run Time: 07/18/07 17:26

lem	Ru2402	Sb2068	Se1960	si2881	5n1899
Jine	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Vg	<.0000	18.48	<.0000	8755.	22.63
Jtddev	.9418	8.52	1.515	33.	.32
RSD	2.224	46.13	106.6	.3778	1.428
⊧1	<.0000	24.51	<pre>&lt; .0000</pre>	8732.	22.86
⊧2	<.0000	12.45	< .0000	8779.	22.41
llem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Jine	346.446 { 97}	240.063 {140}	214.281 (157)	336.121 {100}	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	36.58	192.3	<.0000	473.8	<.0000
Stddev	2.45	1.0	.4790	4.9	1.991
BRSD	6.703	.5176	15.18	1.027	57.04
±1	34.85	191.6	<.0000	470.4	< .0000
€2	38.32	193.0	<.0000	477.3	< .0000
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Jnits	ppb	ppb	ppb	ppb	
Avg	11.62	23.95	65.08	5.019	
Stddev	2.71	.02	.08	.029	
&RSD	23.34	.0988	.1160	.5873	
⊭1	9.700	23.93	65.02	4.998	
⊭2	13.53	23.96	65.13	5.040	

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iethod: SP	EX Sample Name:	070622060-010A	,IS Operat	or:	
Comment: Run Time:	07/18/07 17:30 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
llem	Ag3280	A13082	Al3961	As1937	Au2427
Line	328.068 {102}	308.215 (109)	396.152 { 85}	193.759 {173}	242.795 {138}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	<.0000	17150.	18140.	<.0000	<.0000
Stddev	.3034	30.	14.	1.551	.5668
&RSD	15.37	.1772	.0777	160.5	1.832
⊭1	<.0000	17130.	18150.	.1304	<.0000
⊭2	<.0000	17170.	18130.	< .0000	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Jnits	ppb	ppb	ppb	ppm	ppb
Avg	<.0000	81.53	<.0000	1.978	11270.
Stddev	.2370	.20	.0224	.886	9.
&RSD	.5754	.2492	687.7	44.79	.0834
#1	<.0000	81.67	<.0000	2.604	11280.
#2	<.0000	81.38	.0126	1.351	11270.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 {147}	357.869 { 94}	324.754 {103}	259.940 {129}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	9.408	4.978	3.734	20030.
Stddev	.0724	.009	.876	1.047	306.
&RSD	56.91	.1011	17.61	28.03	1.525
⊭1	<.0000	9.402	4.358	2.994	19820.
#2	<.0000	9.415	5.597	4.475	20250.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Jnits	ppm	ppb	ppb	ppb	ppb
Avg	2.764	<.0000	693.6	<.0000	4572.
Stddev	3.228	.1691	1.5	1.734	3.
&RSD	116.8	5.338	.2154	29.06	.0757
#1	.4812	<.0000	694.6	< .0000	4575.
#2	5.047	<.0000	692.5	< .0000	4570.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	586.995 { 57}	589.592 { 57}	231.604 {145}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	142.9	1.806	1850.	1892.	10.51
Stddev	.2	.151	1.	2.	.24
%RSD	.1534	8.382	.0477	.1006	2.325
#1	142.7	1.913	1851.	1890.	10.34
#2	143.0	1.699	1849.	1893.	10.68
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 [152]	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	291.5	1.675	<.0000	230.8	<.0000
Stddev	.0	.461	328.4	10.7	.1858
%RSD	.0162	27.50	140.0	4.637	1.377
#1	291.5	2.000	< .0000	223.2	<.0000
#2	291.6	1.349	< .0000	238.3	<.0000

ample Name: 070622060-010A,IS Run Time: 07/18/07 17:30

:lem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
.ine	240.272 {140}	206.833 [162]	196.090 {171}	288.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
.vg	<.0000	5.592	<.0000	8310.	23.23
}tdde⊽	.4262	1.001	.0927	11.	.46
;RSD	1.304	17.89	2.773	.1295	1.959
:1	<.0000	6.300	<.0000	8318.	22.91
:2	<.0000	4.885	<.0000	8303.	23.56
lem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
ine	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
lvg	107.0	144.8	<.0000	496.8	<.0000
Jtddev	.8	.6	1.407	.7	1.452
gRSD	.7659	.4177	123.1	.1454	34.86
1	106.4	144.4	< .0000	496.3	< .0000
2	107.6	145.2	< .0000	497.3	< .0000
llem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 [115]	239.709 {140}	213.856 {157}	339.198 { 99}	
Jnits	ppb	ppb	ppb	ppb	
Vyg	4.399	16.81	67.46	4.725	
Stddev	3.032	.39	.25	.326	
SRSD	68.93	2.344	.3772	6.900	
#1	2.255	16.54	67.64	4.956	
\$2	6.543	17.09	67.28	4.495	

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fethod: Si	PEX Sample Name:	070622060-011A	,IS Operat	or:	
lomment: Run Time:	07/18/07 17:36 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
llem	Ag3280	Al3082	Al3961	As1937	Au2427
Line	328.068 {102}	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 {138}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	<.0000	11330.	11890.	57.76	<.0000
Stddev	.0000	68.	40.	.21	.5841
&RSD	.000 <b>2</b>	.5999	.3367	.3677	2.306
<b>¦1</b>	<.0000	11280.	11870.	57.91	<.0000
⊧2	<.0000	11380.	11920.	57.61	<.0000
Llem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Jnits	ppb	ppb	ppb	ppm	ppb
Avg	<.0000	292.3	2.580	3.527	6094.
Stddev	.0254	1.7	.043	.373	28.
&RSD	.0800	.5883	1.653	10.57	.4644
;1	<.0000	291.0	2.611	3.263	6074.
†2	<.0000	293.5	2.550	3.790	6114.
llem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 {147}	357.869 { 94}	324.754 {103}	259.940 {129}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	.6797	15.37	29.96	82.58	18690.
Stddev	.0900	.00	.69	.90	17.
&RSD	13.24	.0032	2.303	1.084	.0904
#1	-6161	15.37	30.44	81.95	18670.
#2	-7433	15.37	29.47	83.21	18700.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Jnits	ppm	ppb	ppb	ppb	ppb
Avg	3.203	<.0000	661.4	7.193	723.4
Stddev	1.811	.6420	.5	1.539	2.3
&RSD	56.55	16.43	.0828	21.40	.3231
₩1	1.922	<.0000	661.0	6.104	725.1
₩2	4.484	<.0000	661.8	8.281	721.7
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 ( 57)	231.604 {145}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	144.2	7.667	193.2	183.6	44.71
Stddev	.2	.159	.6	.6	.07
&RSD	.1433	2.078	.2917	.3426	.1549
<b>#1</b>	144.1	7.780	192.8	183.2	44.66
⊭2	144.3	7.555	193.6	184.1	44.76
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 (149)	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Jnits	ppB	ppb	ppb	ppb	ppb
Avg	273.5	46.61	2673.	207.6	<.0000
Stddev	1.0	.30	1480.	1.8	1.301
&RSD	.3756	.6526	55.37	.8554	9.936
₽1	272.8	46.83	1626.	206.4	< .0000
₽2	274.2	46.40	37 <b>19</b> .	208.9	< .0000

Sample Name: 070622060-011A,IS Run Time: 07/18/07 17:36

llem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Jine	240.272 {140}	206.833 {162}	196.090 (171)	288.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	4.748	5.682	4418.	33.90
Stddev	.3382	1.270	.309	27.	.16
ARSD	1.136	26.74	5.444	.6181	.4626
‡1	<.0000	3.851	5.901	4398.	34.01
∳2	<.0000	5.646	5.463	4437.	33.79
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	146.8	133.3	<.0000	1075.	<.0000
Stddev	1.5	.7	.6883	8.	1.369
ARSD	1.040	.5476	5.976	.7309	38.26
#1	147.9	132.8	<.0000	1069.	< .0000
#2	145.7	133.8	<.0000	1081.	< .0000
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Jnits	ppb	ppb	ppb	ppb	
Avg	85.05	15.40	49.65	26.04	
Stddev	1.28	.31	.02	.30	
≹RSD	1.501	2.030	.0331	1.140	
⊭1	85.95	15.17	49.66	25.83	
∲2	84.15	15.62	49.64	26.25	

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ethod: SPEX	Sample Name:	070622060-012A	,IS Operat	or:	
Comment: un Time: 07/10	B/07 17:40 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
:lem	Ag3280	A13082	Al3961	As1937	Au2427
.ine	328.068 (102)	308.215 (109)	396.152 { 85}	193.759 (173)	242.795 {138}
Inits	ppb	ppb	ppm	ppb	ppb
.vg	<.0000	7536.	7792.	32.33	<.0000
:tddev	.2429	37.	12.	.84	.7648
.RSD	9.591	.4897	.1564	2.603	6.366
-1	<.0000	7510.	7783.	31.73	<.0000
-2	<.0000	7562.	7801.	32.92	<.0000
lem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
ine	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Jnits	ppb	ppb	ppb	ppm	ppb
Vg	<.0000	161.1	1.184	5.175	4345.
Jtddev	.5528	.4	.056	.932	2.
RSD	2.034	.2367	4.696	18.02	.0540
⊧1	<.0000	160.8	1.145	5.834	4343.
⊧2	<.0000	161.4	1.224	4.515	4346.
Clem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Jine	228.802 {147}	228.616 {147}	357.869 { 94}	324.754 {103}	259.940 {129}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	.5881	19.18	24.70	86.56	14550.
Stddev	.0000	.19	.22	.55	51.
&RSD	.0000	1.004	.8982	.6322	.3531
+1	.5881	19.05	24.55	86.17	14510.
+2	.5881	19.32	24.86	86.94	14580.
Clem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87]
Jnits	ppm	ppb	ppb	ppb	ppb
Avg	4.524	<.0000	590.0	8.833	570.1
Stddev	2.435	1.352	2.2	.626	9.3
&RSD	53.83	53.62	.3648	7.085	1.638
¥1	2.802	< .0000	588.5	9.275	563.5
≸2	6.245	< .0000	591.5	8.390	576.7
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57]	589.592 { 57}	231.604 {145}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	157.2	5.735	170.5	159.7	51.35
Stddev	.0	.043	.7	.7	.01
&RSD	.0139	.7444	.4017	.4495	.0277
F1	157.2	5.705	170.0	159.2	51.34
F2	157.2	5.765	171.0	160.2	51.36
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Jnits	ppB	ppb	ppb	ppb	ppb
Avg	212.7	67.48	<.0000	174.4	<.0000
Stddev	.8	.36	2467.	26.1	1.301
&RSD	.3538	.5262	302.4	14.99	12.07
#1	213.3	67.74	928.5	192.9	<pre>&lt; .0000 &lt; .0000</pre>
₽2	212.2	67.23	< .000	155.9	

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page ∠

Sample Name: 070622060-012A,IS Run Time: 07/18/07 17:40

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	3.020	6.294	3346.	26.34
Stddev	.8938	.212	.062	4.	.42
&RSD	3.817	7.006	.9821	.1254	1.592
⊭1	<.0000	2.871	6.250	33 <b>43.</b>	26.04
⊮2	<.0000	3.170	6.337	3349.	26.64
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97]	240.063 (140)	214.281 {157}	336.121 {100}	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	79.78	109.7	<.0000	919.5	<.0000
Stddev	.13	2.6	2.844	2.9	.4148
≷RSD	.1664	2.360	30.12	.3158	18.86
#1	79.87	107.9	< .0000	917.4	<.0000
#2	79.68	111.6	< .0000	921.5	<.0000
Elem	V 2924	W_2397	Zn2138	Zr3391	
Line	292.402 (115)	239.709 {140}	213.856 {157}	339.198 { 99}	
Jnits	ppb	ppb	ppb	ppb	
Avg	72.64	9.361	52.34	4.599	
Stddev	1.91	.591	.18	.980	
&RSD	2.635	6.317	.3380	21.32	
#⊥	73.99	8.943	52.21	5.292	
#2	71.29	9.779	52.46	3.906	

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tethod: SPEX Sample Name: 070622060-013A,IS Operator:

Comment: Run Time:	07/18/07 17:45 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Clem	Ag3280	Al3082	A13961	As1937	Au2427
Line	328.068 {102}	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 {138}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	<.0000	71430.	75880.	83.15	<.0000
Stddev	1.579	915.	269.	.21	.5612
SRSD	16.06	1.280	.3549	.2531	.9942
±1	< .0000	72080.	75690.	83.00	<.0000
⊧2	< .0000	70790.	76070.	83.30	<.0000
Slem	B 2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Jnits	ppb	ppb	ppb	ppm	ppb
Avg	<.0000	1581.	8.379	8.108	36580.
Stddev	.0265	6.	.004	1.165	191.
ARSD	.0267	.3761	.0462	14.37	.5225
1	<.0000	1577.	8.381	8.932	36440.
2	<.0000	1586.	8.376	7.284	36710.
llem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 (147)	228.616 {147}	357.869 { 94}	324.754 (103)	259.940 {129}
Jnits	ppb	ppb	ppb	ppb	ppb
Vg	1.010	56.04	63.32	143.9	50660.
Stddev	.009	.07	2.28	.7	716.
SRSD	.8686	.1188	3.599	.5168	1.413
⊧1	1.016	56.00	64.93	143.4	50150.
‡2	1.004	56.09	61.71	144.4	51160.
llem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Jnits	ppm	ppb	ppb	ppb	ppb
Avg	4.884	<.0000	10880.	34.54	5236.
Stddev	1.812	.8450	89.	.26	20.
Stddev	37.10	5.698	.8169	.7480	.3010
⊧1	3.603	<.0000	10820.	34.72	5222.
⊧2	6.165	<.0000	10940.	34.36	5250.
llem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Jine	257.610 {131}	202.030 {166}	588.995 { 57]	589.592 { 57}	231.604 {145}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	1848.	26.41	834.1	823.7	119.6
Stddev	2.	.51	4.7	7.1	.1
RSD	.1025	1.925	.5617	.8606	.0471
⊧1	1847.	26.05	830.8	818.7	119.7
⊧2	1850.	26.77	837.4	828.7	119.6
llem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Jnits	ppB	ppb	ppb	ppb	ppb
Vg	874.5	48.81	4998.	736.7	<.0000
Hddev	.7	1.37	164.	10.7	1.704
RSD	.0836	2.803	3.288	1.452	3.864
⊧1	873.9	47.85	4882.	729.2	<pre>&lt; .0000 &lt; .0000 </pre>
⊧2	875.0	49.78	5115.	744.3	

Sample Name: 070622060-013A,IS Run Time: 07/18/07 17:45

Elem	Ru2402	Sb2068	Se1960	Si2681	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	8.735	2.120	8544.	25.07
Stddev	.9588	1.905	.958	46.	.16
%RSD	1.167	21.81	45.20	.5392	.6209
#1	<.0000	10.08	2.797	8512.	25.18
#2	<.0000	7.388	1.442	8577.	24.96
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	624.7	382.1	<.0000	3821.	<.0000
Stddev	4.1	.6	.5988	41.	.8710
≹RSD	.6565	.1696	3.513	1.076	15 31
∦1	621.8	381.6	<.0000	3792.	<.0000
¥2	627.6	382.6	<.0000	3850.	
llem	V_2924	W 2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Jnits	ppb	ppb	ppb	ppb	
Avg	114.5	42.34	247.3	63.62	
Stddev	2.4	1.32	.2	.21	
sRSD	2.088	3.122	.0644	.3250	
:1	112.8	41.41	247.2	63.48	
·2	116.2	43.27	247.4	63.77	

Method: SPEX

Sample Name: 070622060-014A, IS Operator:

Run Time:	07/18/07 17:50 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Elem	Ag3280	Al3082	Al3961	As1937	Au2427
Line	328.068 [102]	300.215 [109]	396.152 { 85}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppm	ppb	ppb
Avg	<.0000	13990.	15030.	33.42	<.0000
Stddev	1.093	244.	96.	.66	.2530
%RSD	94.34	1.743	.6360	1.968	2.033
#1	< .0000	13820.	14970.	33.89	<.0000
#2	< .0000	14160.	15100.	32.96	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Units	ppb	ppb	ppb	ppm	ppb
Avg	<.0000	202.5	2.299	6.328	9324.
Stddev	.1489	2.0	.011	1.165	52.
%RSD	.5063	.9852	.4870	18.42	.5579
#1	<.0000	201.1	2.306	7.152	9287.
#2	<.0000	203.9	2.291	5.504	9360.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 (147)	357.869 { 94}	324.754 (103)	259.940 {129)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.7355	13.46	23.41	67.17	17440.
Stddev	.0022	.09	2.40	.20	29.
&RSD	.2974	.6846	10.26	.2988	.1649
#1	.73 <b>4</b> 0	13.39	21.71	67.31	17410.
#2	.7371	13.52	25.10	67.03	17460.
Elem	Ge2068	In2306	K 7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	4.764	<.0000	887.6	.5924	1580.
Stdde <del>v</del>	6.739	.1351	10.4	1.796	24.
&RSD	141.5	2.820	1.170	303.2	1.513
#1	< .0000	<.0000	880.3	1.862	1563.
#2	9.529	<.0000	895.0	< .0000	1597.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 (131)	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	351.2	4.552	349.7	339.6	33.38
Stddev	.5	.280	1.9	4.2	.00
&RSD.	.1402	6.138	.5452	1.234	.0112
#1	350.8	4.750	348.4	336.7	33.38
#2	351.5	4.355	351.1	342.6	33.38
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	263.9	72.73	114.6	202.1	<.0000
Stddev	.8	.62	3124.	14.3	.5884
%RSD	.2862	.8493	2726.	7.056	4.178
#1	264.4	72.29	2324.	192.1	<.0000
#2	263.4	73.17	< .000	212.2	<.0000

Sample Name: 070622060-014A, IS Run Time: 07/18/07 17:50

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	3.701	8.129	5456.	26.26
Stddev	1.278	2.405	2.040	42.	.16
&RSD	4.826	64.99	25.09	.7679	.5921
₿1	< .0000	5.401	9.571	5427.	26.15
₿2	< .0000	2.000	6.687	5486.	26.37
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 {140}	214.281 (157)	336.121 {100}	190.864 (176)
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	100.1	129.2	<.0000	981.2	1.496
Stddev	1.0	4.3	1.707	14.7	2.323
&RSD	.9918	3.340	20.46	1.500	155.3
#1	99.38	126.2	<pre>&lt; .0000</pre>	970.8	3.138
#2	100.8	132.3	< .0000	991.6	< .0000
Elem	V_2924	₩_2397	Zn2138	Zr3391	
Line	292.402 [115]	239.709 {140}	213.856 {157}	339.198 { 99}	
Jnits	ppb	ppb	ppb	ppb	
Avg	47.03	14.89	63.84	13.11	
Stddev	6.54	.49	.16	.36	
&RSD	13.90	3.270	.2437	2.722	
#1	42.41	15.24	63.73	13.36	
#2	51.66	14.55	63.95	12.85	

Method: SPEX	Sample Name:	070622060-014A	DP,IS Operat	cor:	
Comment: Run Time: 07/18/	/07 17:54 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Elem	Ag3280	Al3082	Al3961	As1937	Au2427
Line	328.068 {102}	308.215 (109)	396.152 { 85}	193.759 {173}	242.795 {138}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	<.0000	14240.	15000.	30.84	<.0000
Stddev	.3643	109.	81.	.90	.4660
&RSD	11.95	.7683	.5388	2.907	2.134
#1	<.0000	14160.	14950.	30.21	<.0000
∦2	<.0000	14320.	15060.	31.47	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 (176)	317.933 {105}
Jnits	ppb	ppb	ppb	ppm	ppb
Avg	<.0000	204.6	2.287	3.164	9362.
Stddev	.2613	1.1	.043	.979	39.
%RSD	.9058	.5290	1.865	30.93	.4199
#1	<.0000	203.8	2.317	3.856	9334.
#2	<.0000	205.3	2.257	2.472	9390.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 [147]	228.616 {147}	357.869 { 94}	324.754 {103}	259.940 (129)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.8209	12.73	21.59	68.47	17110.
Stddev	.0483	.01	1.38	.05	24.
&RSD	5.887	.0924	6.383	.0732	.1404
₩1	.7867	12.72	20.62	68.51	17120.
₩2	.8551	12.74	22.56	68.44	17090.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Onits	ppm	ppb	ppb	ppb	ppb
Avg	6.247	<.0000	897.8	1.823	1589.
Stddev	.455	.5241	5.6	.522	14.
&RSD	7.280	12.98	.6193	28.67	.8937
÷1	5.925	<.0000	893.8	1.453	1579.
#2	6.568	<.0000	901.7	2.192	1599.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 [131]	202.030 (166)	588.995 { 57}	589.592 { 57}	231.604 (145)
Units	ppb	ppb	ppb	ppb	ppb
Avg	332.2	3.919	350.3	341.2	31.70
Stddev	.1	.306	.0	1.5	.33
%RSD	.0419	7.816	.0054	.4401	1.051
#1	332.3	4.135	350.3	340.1	31.94
#2	332.1	3.702	350.3	342.2	31.46
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	245.4	68.95	1452.	203.4	<.0000
Stddev	.6	.74	904.	4.2	.7428
%RSD	.2561	1.076	62.30	2.053	6.257
₩1	245.0	68.42	812.2	200.5	<.0000
#2	245.8	69.47	2091.	206.4	<.0000

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Sample Name: 070622060-014ADP,IS Run Time: 07/18/07 17:54

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	208.158 {116}	189.989 (176)
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	2.191	6.119	5490.	24.48
Stddev	.3688	.692	.619	48.	.39
%RSD	1.312	31.61	10.11	.8798	1.608
#1	<.0000	2.680	5.682	5456.	24.76
#2	<.0000	1.701	6.557	5525.	24.20
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 ( 97)	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	102.4	126.3	<.0000	995.9	2.698
Stddev	.7	2.5	.0892	7.0	.788
&RSD	.6483	1.989	1.342	.7058	29.21
#1	102.9	124.5	<.0000	991.0	2.141
#2	101.9	128.1	<.0000	1001.	3.256
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 [140]	213.856 [157]	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	47.04	14.72	60.33	13.72	
Stddev	.16	.72	.08	1.04	
%RSD	.3386	4.877	.1360	7.581	
#1	46.92	15.22	60.27	14.45	
#2	47.15	14.21	60.39	12.98	

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Method: Si	PEX Sample	e Name:	070622060-014A	MS,IS Operat	or:	
Comment: Run Time:	07/18/07 17:5	в Туре:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Elem Line Jnits Avg Stddev ≹RSD	; 328.068	Ag3280 {102} ppb 40.65 .24 .5983	A13082 308.215 (109) ppb 20910. 145. .6917	Al3961 396.152 { 85} ppm 22030. 135. .6123	As1937 193.759 {173} ppb 89.14 .99 1.111	Au2427 242.795 {138} ppb <.0000 .1904 .5741
#1 #2		40.48 40.83	20800. 21010.	21940. 22130.	89.84 88.44	<.0000 <.0000
Elem Line Units Avg Stddev &RSD	249.678	B_2496 {135} ppb <.0000 .2153 .4940	Ba4934 493.409 { 68} ppb 2293. 18. .7903	Be3130 313.042 {107} ppb 55.49 .25 .4453	Bi1902 190.241 {176} ppm 5.999 1.165 19.41	Ca3179 317.933 {105} ppb 7979. 62. .7786
#1 #2		<.0000 <.0000	2280. 2306.	55.31 55.66	6.823 5.176	7935. 8023.
Elem Line Units Avg Stddev &RSD	( 228.802	Cd2288 {147} ppb 49.90 .21 .4228	Co2286 228.616 {147} ppb 513.5 1.5 .2868	Cr3578 357.869 { 94} ppb 231.0 .3 .1157	Cu3247 324.754 {103} ppb 342.4 1.6 .4660	Fe2599 259.940 {129} ppb 22260. 287. 1.290
#1 #2		49.76 50.05	512.4 514.5	231.2 230.8	341.3 343.5	22060. 22460.
Elem Line Units Avg Stddev %RSD	( 206.866	Ge2068 {162} ppm 18.46 .39 2.129	In2306 230.606 {146} ppb <.0000 .7942 830.0	K_7664 766.490 { 44} ppb 1142. 6. .5420	Li6103 610.362 { 55} ppb 21.10 .03 .1295	Mg3038 383.826 { 87} ppb 1432. 12. .8568
#1 #2		18.74 18.18	.4659 <.0000	1137. 1146.	21.12 21.08	1424. 1441.
Elem Line Units Avg Stddev &RSD	257.610	In2576 (131) ppb 823.3 1.9 .2348	Mo2020 202.030 {166} ppb 6.466 .174 2.692	Na5889 588.995 { 57} ppb 442.0 2.3 .5189	Na5895 589.592 [ 57] ppb 436.5 3.6 .8244	Ni2316 231.604 {145} ppb 556.1 1.2 .2107
#1 #2		822.0 824.7	6.589 6.342	440.4 443.6	433.9 439.0	555.3 556.9
Elem Line Units Avg Stddev %RSD	( 225.585	Ds2255 {149} ppB 340.2 2.2 .6524	Pb2203 220.353 {152} ppb 90.71 .77 .8461	Pd3242 324.270 {103} ppb 2324. 493. 21.23	Pt2036 203.646 {164} ppb 359.4 10.7 2.987	Pt2144 214.423 {156} ppb <.0000 .6471 1.715
#1 #2		338.7 341.8	91.25 90.17	1975. 2673.	351.8 366.9	<.0000

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Sample Name: 070622060-014AMS, IS Run Time: 07/18/07 17:58

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	380.6	20.48	6701.	20.71
Stddev	.6242	.0	.84	63.	.27
≹RSD	1.653	.0107	4.086	.9416	1.282
유]	<.0000	380.6	19.89	6657.	20.52
#2	<.0000	380.6	21.07	6746.	20.90
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 (100)	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	127.2	170.3	<.0000	1271.	36.57
Stddev	1.0	.5	.2483	8.	.16
%RSD	.7831	.3128	.2743	.6553	.4447
₩1	126.5	169.9	<.0000	1265.	36.69
₩2	127.9	170.7	<.0000	1277.	36.46
Elem	V_2924	₩_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140]	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	582.9	<.0000	578.5	18.94	
Stddev	8.0	.4237	.4	.65	
%RSD	1.369	.2218	.0665	3.450	
#1	577.3	<.0000	578.3	18.48	
#2	588.6	<.0000	578.B	19.41	

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Method: Si	PEX Sample N	ame: 07	0622060-014A	A,IS Operat	cor:	
Comment: Run Time:	07/18/07 18:02 T	ype: Un	k Mode:	CONC Corr.	Fact: 1.000000	
Elem Line Units Avg Stddev &RSD	Ag3 328.068 (1 90 1 1.	280 02) 30 ppb .45 .70 879	Al3082 8.215 {109} ppb 17860. 101. .5660	Al3961 396.152 { 85} ppm 18840. 31. .1652	As1937 193.759 {173} ppb 113.5 1.1 .9502	Au2427 242.795 {138) ppb <.0000 .0439 .1504
#1 #2	91 89	.65 .25	17780. 17930.	18860. 18820.	112.7 114.2	<.0000 <.0000
Elem Line Units Avg Stddev %RSD	B_2 249.678 {1 <.0 .4 1.	496 35} 49 ppb 000 827 547	Ba4934 3.409 { 68} ppb 4175. 18. .4278	Be3130 313.042 {107} ppb 107.4 .6 .6010	Bi1902 190.241 [176} ppm 4.878 .419 8.601	Ca3179 317.933 {105} ppb 9158. 35. .3831
#1 #2	<.0 <.0	000 000	4162. 4187.	106.9 107.8	4.581 5.175	9133. 9183.
Elem Line Units Avg Stddev %RSD	Cd2 228.802 [1 ] 10 .4	288 47} 22 ppb 3.6 .4 281	Co2286 8.616 {147} ppb 1063. 5. .4271	Cr3578 357.869 { 94) ppb 440.3 .6 .1412	Cu3247 324.754 {103} ppb 602.7 1.3 .2231	Fe2599 259.940 (129) ppb 18560. 476. 2.564
#1 #2	10	3.3 3.9	1060. 1066.	439.8 440.7	601.8 603.7	18230. 18900.
Elem Line Units Avg Stddev %RSD	Ge2 206.866 {1 27 1 4.	068 62} 230 ppm .15 .13 171	In2306 0.606 {146} ppb 3.418 .625 18.30	K_7664 766.490 [ 44} ppb 894.6 .4 .0476	Li6103 610.362 { 55} ppb 1.529 .052 3.432	Mg3838 383.826 { 87} ppb 1540. 2. .1518
#1 #2	27 26	.95 .35	3.860 2.975	894.3 894.9	1.566 1.492	1538. 1542.
Elem Line Units Avg Stddev &RSD	Mn2 257.610 {1 13 .24	576 31} 202 20b 76. 3. 430	Mo2020 2.030 {166} ppb 6.018 .031 .5161	Na5889 588.995 { 57} ppb 351.5 2.5 .7163	Na5895 589.592 { 57} ppb 343.4 2.3 .6678	Ni2316 231.604 {145} ppb 1125. 8. .7492
#1 #2	13 <sup>-</sup> 13 <sup>-</sup>	74. 78.	5.996 6.040	349.7 353.2	341.8 345.0	1119. 1131.
Elem Line Units Avg Stddev %RSD	Os22 225.585 {14 1 284 1 284 244	255 49} 220 ppB 4.1 1.3 476	Pb2203 ).353 (152) ppb 113.3 1.5 1.290	Pd3242 324.270 {103} ppb 2905. 164. 5.660	Pt2036 203.646 {164} ppb 395.1 12.5 3.159	Pt2144 214.423 {156} ppb <.0000 3.964 6.597
#1 #2	283 285	3.2 5.0	112.2 114.3	3021. 2789.	403.9 386.2	<pre>&lt; .0000 &lt; .0000</pre>

Sample Name: 070622060-014AA,IS Run Time: 07/18/07 18:02

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Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	999.4	29.83	5311.	25.42
Stddev	1.101	80.1	.15	13.	.29
%RSD	3.621	8.015	.5184	.2376	1.131
#1	<pre>&lt; .0000</pre>	942.8	29.72	5302.	25.62
#2	< .0000	1056.	29.94	5320.	25.21
Elem	5r3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	98.35	145.7	<.0000	969.4	89.98
Stddev	1.46	3.9	1.616	7.5	.21
&RSD	1.484	2.696	.9083	.7763	.2308
#1	97.32	142.9	< .0000	964.1	89.83
₿2	99.38	148.5	< .0000	974.7	90.13
Elem	V_2924	₩_2397	Zn2138	Zr3391	
Line	292.402 [115}	239.709 {140}	213.856 {157}	339.198 { 99]	
Jnits	ppb	ppb	ppb	ppb	
Avg	1084.	<.0000	1121.	12.33	
Stddev	13.	2.074	5.	.62	
&RSD	1.207	.4687	.4225	5.060	
₩1 ₩2	1075. 1093.	<pre>&lt; .0000 &lt; .0000</pre>	1117. 112 <b>4</b> .	11.89 12.77	

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Method: SPEX Comment:	Sample Name:	070622060-0142	AL,IS Opera	tor:	
Run Time: 07/18	8/07 18:06 Type:	Unk Mode:	CONC Corr	.Fact: 1.000000	
Elem	Ag3280	A13082	A13961	As1937	Au2427
Line	328.068 {102}	308.215 {109}	396.152 { 85}	193.759 (173)	242.795 {138}
Units	ppb	ppb	ppm	ppb	ppb
Avg	.3878	3095.	3201.	9.666	<.0000
Stddev	1.458	2.	7.	1.078	.2586
€RSD	375.9	.0580	.2309	11.15	10.62
#1	< .0000	3096.	3206.	8.903	<.0000
#2	1.419	3093.	3196.	10.43	<.0000
Elem	B 2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 (135)	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 (105)
Units	ppb	ppb	ppb	ppm	dqq
Avg	<.0000	43.13	.4850	. 0327	2060.
Stddev	.2544	- 28	0075	.3729	3.
%RSD	3.373	.6492	1.541	1140.	.1344
#1	<.0000	43.33	.4797	<.0000	2062.
#2	<.0000	42.93	.4903	.2964	2058.
Elem	Cd2288	Co2286	C+3578	013247	Pa2500
Line	228,802 (147)	228,616 (147)	357 869 ( 94)	324 754 (103)	250 040 (120)
Units	daa		120 J 000.000	1001 PC/.P2C	2J9.940 (129)
Ανσ	.1071	3.282	3.314	15 74	4157
Stddev	.0307	.280	1.380	1.09	28
FRSD	28.69	8.514	41.64	6.952	.6777
#1	. 1288	3,480	2,338	16 52	4177
#2	.0854	3.085	4.290	14.97	4137.
Elem	Ge2068	Tn2306	K 7664	T.; 6103	M~2020
I.ine	206-866 (162)	230.606 (146)	766 490 7 441	610 362 / 551	202 026 1 021
Units			לבב ו מכבימסי	100 / 2000010	J0J.020 [ 0/]
Ava	<. 0000	<.0000	165 6	1 521	ב רבר
Stddev	5.266	1.251	.7	227	33
%RSD	874.9	197.4	4418	14.95	9209
					. 5200
#1 #0	< .0000	< .0000	165.1	1.360	360.0
₩Z	5.122	.2509	100.1	1.682	355.4
Elen	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 (131)	202.030 (166)	588.995 { 57}	589.592 { 57]	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	79.09	1.150	60.49	48.91	7.879
Stadev	. 12	.093	.38	.02	.329
*KSD	. 9052	8.099	.6343	.0501	4.179
#1	79.60	1.084	60.76	48.89	B.112
2	78.59	1.216	60.21	48.92	7.647
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103}	203.646 {164}	214.423 (156)
Jnits	ppB	ppb	ppb	dqq	daa
Avg	58.34	13.71	<.0000	9.665	<.0000
Stddev	.85	- 49	2139.	4.755	.2168
≹RSD	1.453	3.550	122.4	49.20	6.827

14.06 < .000 13.37 < .000 6.303 13.03

₿1 ₿2 58.94 57.74

<.0000 <.0000 Sample Name: 070622060-014AL,IS Run Time: 07/18/07 18:06

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Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	34.76	2.535	1179.	6.623
Stddev	.0000	12.28	.309	23.	.707
&RSD	.0003	35.31	12.19	1.957	10.67
#1	<.0000	43.44	2.753	1195.	7.123
#2	<.0000	26.08	2.316	1163.	6.123
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 (100)	190.864 (176)
Units	ppb	ppb	ppm	ppb	ppb
Avg	22.43	32.11	<.0000	213.3	1.613
Stddev	2.06	4.62	.3593	.2	.166
&RSD	9.168	14.38	22.63	.0907	10.28
#1	23.88	35.38	<.0000	213.1	1.496
#2	20.98	28.84	<.0000	213.4	1.731
Elem	V_2924	₩_2397	Zn2138	2r3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	13.99	3.041	14.80	2.184	
Stddev	1.28	.209	.34	.357	
%RSD	9.129	6.862	2.267	16.33	
#1	13.09	2.893	15.03	1.932	
#2	14.90	3.189	14.56	2.436	

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Method: SI Comment:	PEX Sampl	e Name:	CCV-6			Operat	or:			
Run Time:	07/18/07 18:1	0 Type:	Unk	Mode:	CONC	Corr.	Fact: 1	.000000		
Elem Line Jnits Avg Stddev &RSD	328.06B	Ag3280 {102} ppb 488.9 .3 .0701	A) 308.215   2	L3082 (109) ppb 2146. 15. 6896	7 396.152	A13961 { 85} ppm 2074. 4. .1902	193.759	As1937 9 {173} ppb 2004. 7. .3716	242.79	Au2427 5 {138} ppb <.0000 .5887 4.359
₩1 ₩2		489.2 488.7	2	2157. 2136.		2077. 2072.		1999. 2009.		<.0000 <.0000
Elem Line Jnits Avg Stddev &RSD	ן 249.678	3_2496 {135} ppb 1906. 6. .3189	Ba 493.409 { 2	14934 68} ppb 2051. 7. 3523	E 313.042	Be3130 {107} ppb 2037. 2. .1223	190.241	Bi1902 {176} ppm <.0000 1.165 104.0	317.933	Ca3179 3 {105} ppb 2019. 3. .1563
‡1 ≨2		1902. 1910.	2	046. 057.		2036. 2039.	<	.0000		2017. 2021.
Elem Jine Jnits Avg Stddev RSD	0 228.802	Cd2288 {147} ppb 2111. 4. .2000	Cc 228.616 [ 2	2286 147} ppb 042. 6. 2894	C 357.869	r3578 { 94} ppb 1997. 4. .1850	324.754	Cu3247 {103} ppb 2011. 5. .2345	259.940	Fe2599 (129) 2082. 4. .1807
1  2		2108. 2114.	2	038. 046.		1999. 1994.		2008. 2015.		208 <b>0.</b> 2085.
lem Jnits Nyg Stddev RSD	206.866 <	e2068 [162] ppm .0000 2.888 13.79	In 230.606 { <. 1	2306 146} ppb 0000 4393 3.77	K 766.490	7664 { 44} ppb 9716. 10. .1008	610.362	Li6103 { 55} ppb 2016. 4. .1977	383.826	Mg3838 { 87} ppb 2026.
:1 :2	< <	.0000 .0000	<. <.	0000		9709. 9723.		2019. 2014.		2026. 2026.
lem ine nits vg tddev RSD	M 257.610	n2576 {131} ppb 2001. 3. .1259	Мо. 202.030 { 2 2	2020 166} ppb 024. 47. .313	Ni 588.995 :	a5889 {57} ppb 1824. 1. .0362	1 589.592	Na5895 { 57] ppb 1847. 2. .1098	231.604	Ni2316 {145} ppb 2094. 6. .2955
1 2		2000. 2003.	1:	991. 058.	-	1825. 1824.		1849. 1846.		2090. 2098.
ilem ine nits vg tddev RSD	0 225.585	s2255 {149} ppB 31.02 .47 1.517	Pb: 220.353 {: 20	2203 152} : ppb 559. 5. 2592	Pc 324.270 { 2 1 4	13242 (103) ppb 2963. 1233. 11.62	I 203.646	2t2036 {164} ppb 390.0 17.2 4.420	214.423	Pt2144 {156} ppb <.0000 35.49 1.941
1 2		31.35 30.69	20 20	055. 063.	2	3835. 2091.		377.8 402.2	< <	.0000

Sample Name: CCV-6 Run Time: 07/18/07 18:10

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	1975.	1996.	3951.	2013.
Stddev	.5090	58.	14.	23.	6.
&RSD	21.52	2.953	.7018	.5895	.3122
#1	<.0000	1934.	1986.	3935.	2009.
#2	<.0000	2016.	2006.	3967.	2017.
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	2031.	23.08	<.0000	<.0000	1987.
Stddev	4.	3.06	2.097	.2140	9.
&RSD	.1948	13.28	.6925	8.112	4282
#1	2034.	25.24	< .0000	<.0000	1981.
#2	2028.	20.91	< .0000	<.0000	1993.
Elem	V_2924	W 2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	1999.	<.0000	2043.	1.112	
Stddev	6.	2.153	6.	1.515	
&RSD	.3077	.2315	.3024	136.2	
1 1 1	1994. 2003.	<pre>&lt; .0000 &lt; .0000 &lt; .0000</pre>	2039. 2047.	2.183 .0409	

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hade T Method: SPEX Sample Name: CCB-6 Operator: Comment: Run Time: 07/18/07 18:14 Type: Unk Mode: CONC Corr.Fact: 1.000000 Ag3280Al3082Al3961As1957328.068 {102}308.215 (109)396.152 { 85}193.759 {173}242.795 [138]ppbppb Elem Line 
 ppb
 ppm
 ppb

 <.0000</td>
 9.654
 <.0000</td>
 <</td>

 .4855
 17.49
 1.703
 .7098

 66.58
 181.2
 168.0
 52.98
 2
 Units Avg <.0000 Stddev .2530 €RSD 261.1 <.0000 < .0000 < .0000 <.0000 22.02 .1907 <.0000 <.0000 #1 .0820 #2 <.0000 B\_2496 Ba4934 Be3130 Bi1902 
 B\_2496
 Ba4934
 Be3130
 B11902
 Ca3175

 249.678 {135}
 493.409 [ 68]
 313.042 {107}
 190.241 {176}
 317.933 {105}

 ppb
 ppb
 ppb
 ppb
 ppb
 ppb

 5.771
 <.0000</td>
 <.0000</td>
 <.0000</td>
 1.806

 .220
 .0443
 .0242
 1.212
 .204

 3.804
 56.14
 15.65
 53.27
 11.31
 Elem Ca3179 Line Units Avq Stddev ₹RSD 5.926<.0000</th><.0000</th><.0000</th>5.615<.0000</td><.0000</td><.0000</td> #1 1.951 #2 1.662 
 Cd2288
 Co2286
 Cr3578
 Cu3247
 Fe2599

 228.802
 [147]
 228.616
 [147]
 357.869
 94
 324.754
 [103]
 259.940
 [129]

 ppb
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 1521
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 .4234
 .7449

 .0461
 .0258
 .5726
 .4470
 .0426

 30.29
 537.7
 16.45
 105.6
 5.715
 Elem Line Units Avq Stddev €RSD .0134 <.0000 <.0000 <.0000 .1847 .7395 .1073 #1 .7148 .1195 #2 .7750 Ge2068 In2306 K\_7664 Li6103 Elem Líne 
 Ge2068
 In2306
 K\_/664
 L16103
 Mg3838

 206.866 {162}
 230.606 {146}
 766.490 { 44}
 610.362 { 55}
 383.826 { 87}

 ppm
 ppb
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 .2028
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 26.92
 7.151

 2.830
 .7773
 .0464
 .64
 1.751

 234.8
 383.2
 .8375
 2.361
 24.49
 Mg3838 Units Ανα Stddev %RSD <.0000 .7524 <.0000 26.47 .7959 <.0000 <.0000 27.37 #1 5.913 #2 8.390 Mn2576Mo2020Na5899Na5895Ni2316257.610 {131}202.030 (166)588.995 [ 57]589.592 { 57}231.604 {145}ppbppbppbppbppb.04322.71624.19<.0000</td>.0258.0110.066.95.4216.379725.532.4253.9164.0801474. Elem Line Units Ανα Stddev 8RSD .0511 2.670 23.52 <.0000 .0354 2.763 24.86 <.0000 #1 <.0000 #2 .2942 Pb2203 Pd3242 Pt2036 
 Os2255
 Pb2203
 Pd3242
 Pt2030
 Pt2130

 225.585 {149}
 220.353 {152}
 324.270 {103}
 203.646 {164}
 214.423 {156}

 ppB
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 1.248

 .7760
 .2236
 2877.
 8.913
 .836

 316.1
 10.83
 380.4
 25.25
 67.03
 Os2255 Elem Line Units Avq Stddev &RSD <.0000 1278. <.0000 <.0000 < .000 <.0000

.3032

<.0000

#1

₩2

1.839

.6563

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## Sample Name: CCB-6 Run Time: 07/18/07 18:14

		-1			
Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	208.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	2.774	<.0000	14.86	.3386
Stddev	.3669	.135	.4327	4.20	.1317
&RSD	24.67	4.848	328.5	28.22	38.89
¥1	<.0000	2.679	.1742	17.83	.2455
¥2	<.0000	2.870	<.0000	11.90	.4318
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 (140)	214.281 [157]	336.121 (100)	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	1.218	4.214	1.990	<.0000	<.0000
Stddev	1.525	.734	1.287	.6114	1.493
&RSD	125.2	17.40	64.67	76.46	145.6
₽1	2.297	4.733	2.901	<.0000	.0300
₽2	.1401	3.696	1.080	<.0000	.0000 >
llem	V_2924	₩_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Jnits	ppb	ppb	ppb	ppb	
Avg	<.0000	<.0000	<.0000	<.0000	
Stddev	2.870	.4058	.0444	.2377	
&RSD	181.8	351.6	66.93	80.78	
<b>₩1</b>	< .0000	.1715	<.0000	<.0000	
₩2	.4503	<.0000	<.0000	<.0000	

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Method: SI	PEX Sample Name:	CRI-2	Operat	or:	
Comment: Run Time:	07/18/07 18:18 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Elem	Ag3280	Al3082	Al3961	As1937	Au2427
Line	328.068 {102}	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 {138}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	15.19	<.0000	<.0000	21.56	<.0000
Stddev	.30	8.395	.4477	.60	.3573
%RSD	1.966	14.66	88.28	2.793	22.74
#1	15.40	< .0000	<.0000	21.98	<.0000
#2	14.98	< .0000	<.0000	21.13	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176)	317.933 {105]
Units	ppb	ppb	ppb	ppm	ppb
Avg	7.285	.1896	8.705	2.207	3.612
Stddev	.027	.0154	.058	1.677	1.942
&RSD	.3713	8.144	.6706	75.99	53.76
#1	7.265	.2005	B.664	3.393	2.239
#2	7.304	.1787	8.746	1.021	4.985
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 (147)	228.616 {147}	357.869 { 94}	324.754 {103}	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	8.662	87.24	16.44	39.66	.8486
Stddev	.124	.30	5.85	.24	.0527
&RSD	1.427	.3412	35.56	.5937	6.210
#1	8.574	87.45	12.30	39.83	.8859
#2	8.749	87.03	20.57	39.49	.8114
Elem	Ge2068	In2306	K 7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146)	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	<.0000	.5613	<.0000	6.248	2.887
Stddev	.5667	.3040	1.856	.465	.778
&RSD	5.571	54.15	24.35	7.433	26.94
#1	<.0000	.7762	<pre>&lt; .0000</pre>	6.577	3.437
#2	<.0000	.3464	< .0000	5.920	2.337
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	24.85	1.136	<.0000	6.426	74.82
Stddev	.02	.004	.5520	.636	.11
&RSD	.0998	.3511	66.97	9.900	.1436
#1	24.87	1.133	<.0000	6.876	74.74
#2	24.83	1.139	<.0000	5.976	74.89
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	<.0000	5.218	580.7	1.258	5.737
Stddev	.6134	.683	164.8	14.26	.001
%RSD	17.24	13.10	28.38	1133.	.0121
#1	<.0000	5.701	697.3	< .0000	5.736
#2	<.0000	4.735	464.2	11.34	5.737

## Sample Name: CRI-2 Run Time: 07/18/07 18:18

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176)
Units	ppb	ppb	ppb	ppb	ppb
Avg	1.468	105.2	9.067	.0020	.1608
Stddev	.213	4.6	.403	12.59	.2155
&RSD	14.55	4.341	4.441	615800.	134.0
#1	1.317	102.0	B.782	8.904	.3132
#2	1.619	108.5	9.352	< .0000	.0084
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 (140)	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	4.077	10.04	<.0000	<.0000	16.95
Stddev	.397	.35	.9277	.4280	2.20
&RSD	9.733	3.437	87.69	132.1	12.97
₩1	4.358	10.29	<.0000	<.0000	15.39
₩2	3.797	9.799	<.0000	<.0000	18.50
Elem	V_2924	₩ 2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Onits	ppb	ppb	ppb	ppb	
Avg	88.15	<.0000	37.03	<.0000	
Stddev	.34	.8319	.05	.2680	
&RSD	.3912	2.603	.1419	19.06	
#1	87.90	<.0000	37.06	<.0000	
#2	88.39	<.0000	36.99	<.0000	

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Method: SPEX	Sample Name:	ICSA-2	Operat	or:	
Comment: Run Time: 07/18/	07 18:22 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Elem	Ag3280	Al3082	A13961	As1937	Au2427
Line	328.068 {102}	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 {138}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	<.0000	376400.	360400.	<.0000	<.0000
Stddev	.0575	952.	2724.	.6245	4.327
&RSD	.0949	.2530	.7560	3.748	.7361
#1	<.0000	377100.	362300.	<.0000	<pre>&lt; .0000</pre>
#2	<.0000	375800.	358500.	<.0000	< .0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176]	317.933 {105}
Units	ppb	ppb	ppb	ppm	ppb
Avg	<.0000	2.093	1.534	27.29	341700.
Stddev	2.505	.043	.076	2.10	378.
%RSD	.7888	2.034	4.962	7.685	.1107
#1	< .0000	2.063	1.480	28.78	342000.
#2	< .0000	2.123	1.588	25.81	341500.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 {147}	357.869 { 94}	324.754 {103}	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	.7368	<.0000	<.0000	111200.
Stddev	.0286	.0244	.4500	.1484	2488.
%RSD	1.670	3.312	.5129	.7006	2.238
#1	<.0000	.7540	<.0000	<.0000	109400.
#2	<.0000	.7195	<.0000	<.0000	112900.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Líne	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87]
Units	ppm	ppb	ppb	ppb	ppb
Avg	.6808	<.0000	<.0000	<.0000	397000.
Stddev	3.795	.1018	.1575	6.985	70.
&RSD	557.4	.3150	.8071	1.692	.0177
₩1	< .0000	<.0000	<.0000	<pre>&lt; .0000 &lt; .0000</pre>	397000.
#2	3.364	<.0000	<.0000		396900.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	3.815	65.95	76.95	<.0000
Stddev	.1029	.043	.44	.86	.0365
&RSD	3.878	1.118	.6713	1.120	.3174
#1	<.0000	3.845	65.64	76.34	<.0000
#2	<.0000	3.784	66.26	77.56	<.0000
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	641.6	<.0000	2440.	2046.	<.0000
Stddev	17.1	.0142	1809.	84.	3.313
%RSD	2.662	.0175	74.13	4.125	3.535
#1	653.7	<.0000	1161.	2105.	<pre>&lt; .0000</pre>
#2	629.5	<.0000	3719.	1986.	< .0000

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Sample Name: ICSA-2 Run Time: 07/18/07 18:22

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 (171)	288.158 {116}	189.989 {176]
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	26.31	<.0000	.0269	2.389
Stddev	9.113	1.44	.0309	8.403	.443
%RSD	3.823	5.486	.4189	31220.	18.55
#1	< .0000	25.29	<.0000	5.969	2.702
#2	< .0000	27.34	<.0000	< .0000	2.075
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 (100)	190.864 {176)
Units	ppb	ppb	ppm	ppb	ppb
Avg	<.0000	748.0	<.0000	<.0000	<.0000
Stddev	.3948	7.7	.0305	.2769	.1241
%RSD	.7033	1.034	.0852	.9029	.7986
#1	<.0000	742.5	<.0000	<.0000	<.0000
#2	<.0000	753.5	<.0000	<.0000	<.0000
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Jnits	ppb	ppb	ppb	ppb	
Avg	12.97	54.71	4.510	<.0000	
Stddev	2.71	2.58	.193	.1765	
&RSD	20.90	4.724	4.271	.5715	
⊭1	14.89	56.54	4.647	<.0000	
⊬2	11.05	52.89	4.374	<.0000	

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Method: Si	PEX Sample N	lame:	ICSAB-2			
Run Time:	07/18/07 18:26 1	lype:	Unk Mode	e: CONC Corr	.Fact: 1.000000	
Elem Line Units Avg Stddev &RSD	Ag3 328.068 {1 92 .6	3280 102} ppb 29.8 5.8 5190	Al308; 308.215 {109 pp] 419200 2042 .487;	2 Al3961 396.152 { 85} ppm 377600. 531. 3 .1407	As1937 193.759 (173) ppb <.0000 8.570 22.95	Au2427 242.795 {138} ppb <.0000 .1204 .0194
#1 #2	92 93	25.8 33.9	417700 420600	. 378000. . 377200.	< .0000 < .0000	<.0000 <.0000
Elem Line Units Avg Stddev %RSD	B_2 249.678 {1 <.0 4. 1.	2496 135] ppb 0000 .028 .085	Ba493 493.409 ( 68 ppl 490. 148-	Be3130 313.042 {107} ppb 460.2 7 2.7 1 .5772	Bi1902 190.241 {176} ppm 32.20 3.54 11.00	Ca3179 317.933 {105} ppb 351100. 1310. .3732
#1 #2	< .0 < .0	0000	490.1 491.2	458.3 2 462.0	29.70 34.71	350200. 352000.
Elem Line Units Avg Stddev &RSD	Cd2 228.802 (1 98 .8	288 .47) ppb 9.9 8.7 804	Co228 228.616 {147 ppl 412. 3.9 .950	5 Cr3578 357.869 { 94} 9 ppb 7 471.4 9 4.4 8 .9368	Cu3247 324.754 {103} ppb 437.1 5.3 1.217	Fe2599 259.940 {129] ppb 119600. 329. .2753
#1 #2	9 B 9 9	13.7 96.1	409.9 415.9	468.3           474.5	433.4 440.9	119300. 119800.
Elem Line Units Avg Stddev &RSD	Ge2 206.866 {1 .9 1. 17	2068 .62) ppm 9600 .699 76.9	In230 230.606 {146 ppl 7.056 .659 9.340	5 K_7664 766.490 { 44} ppb <.0000 .9589 4.663	Li6103 610.362 { 55} ppb <.0000 4.467 1.218	Mg3838 383.826 { 87] ppb 433700. 1007. .2321
#1 #2	2. < .0	161 0000	7.510 6.584	<.0000 <.0000	< .0000 < .0000	433000. 434400.
Elem Line Units Avg Stddev %RSD	Mn2 257.610 {1 49 .5	2576 31) ppb 1.6 2.5 174	Mo2020 202.030 (166) ppt 11.73 6.75 57.53	Na5889           588.995 { 57}           ppb           72.72           3.50           4.819	Na5895 589.592 { 57} ppb 51.63 3.85 7.463	Ni2316 231.604 {145} ppb 829.7 7.2 .8666
#1 #2	4 8 4 9	9.8 13.4	16.51 6.962	70.24 75.20	48.91 54.36	824.6 834.7
Elem Line Units Avg Stddev %RSD	Os2 225.585 {1 10 .0	255 49} ppB 55.	Pb2203 220.353 {152} pph 1025. 7 .7269	Pd3242 324.270 {103} ppb 5173. 1233. 23.84	Pt2036 203.646 {164} ppb 2217. 11. .5094	Pt2144 214.423 {156} ppb <.0000 2.570 .3822
#1 #2	10 10	54. 55.	1019. 1030.	6045. 4301.	2225. 2209.	0000. > 0000. >

## Sample Name: ICSAB-2 Run Time: 07/18/07 18:26

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	41.62	<.0000	<.0000	4.218
Stddev	3.759	12.93	1.669	21.01	.419
&RSD	1.287	31.07	7.761	50.54	9.939
⊭1	<pre>&lt; .0000</pre>	50.76	<pre>&lt; .0000</pre>	<pre>&lt; .0000</pre>	4.514
∦2	< .0000	32.48	< .0000	< .0000	3.921
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 (140)	214.281 {157}	336.121 {100}	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	12.43	871.5	<.0000	<.0000	<.0000
Stddev	1.06	5.1	.3892	1.468	.4563
&RSD	8.538	.5896	65.65	3.401	2.408
⊭1	11.68	867.9	<.0000	<pre>&lt; .0000</pre>	<.0000
¥2	13.18	875.1	<.0000	< .0000	<.0000
Elem	V_2924	₩_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Jnits	ppb	ppb	ppb	ppb	
Avg	459.3	19.25	947.1	<.0000	
Stddev	6.4	1.10	7.3	.3268	
&RSD	1.388	5.722	.7760	47.07	
‡1	454.8	18.47	941.9	<.0000	
≹2	463.8	20.03	952.3	<.0000	

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Method: SPEX	Sample Nam	e: CCV-7	Opera	tor:	
Run Time: 07/1	8/07 18:30 Typ	e: Unk Mode	e: CONC Corr	.Fact: 1.000000	
Elem Line Units Avg Stddev &RSD	Ag328 328.068 {102 pp] 487. 1.1 .364	0 Al3082 308.215 (109) ppt 7 2117. 3 15. 5 .7302	2 Al3961 396.152 { 85} ppm 2077. 5. 2195	As1937 193.759 {173} ppb 2001. 7. .3608	Au2427 242.795 {138} ppb <.0000 .0771 .5867
#1 #2	488.9 486.4	2107. 2128.	2081. 2074.	1996.	<.0000
Elem Line Units Avg Stdde <del>v</del> &RSD	B_2490 249.678 {135] ppt 1905. 5. .2476	5 Ba4934 493.409 { 68 } ppb 2044. 5. 5 .2324	Be3130 313.042 (107) ppb 2029. .0211	Bi1902 190.241 {176} ppm <.0000 1.678 145.4	Ca3179 317.933 {105} ppb 2017. 6. .2823
#1 #2	1902. 1908.	2047. 2040.	2029. 2029.	.0327 < .0000	2021. 2013.
Elem Line Jnits Avg Stddev BRSD	Cd2288 228.802 (147) ppb 2106. 4. .2123	Co2286 228.616 {147} ppb 2044. 4. .1845	Cr3578 357.869 { 94} ppb 1996. 1. .0366	Cu3247 324.754 {103} ppb 2010. 2. 1199	Fe2599 259.940 {129} ppb 2079. 5.
1  2	2102. 2109.	2041. 2046.	1996. 1997.	2012. 2008.	-2384 2076. 2083
lem Line Units Vg Hddev RSD	Ge2068 206.866 {162} ppm <.0000 1.812 7.026	In2306 230.606 {146} ppb <.0000 .7436 27.41	K_7664 766.490 { 44} ppb 9678. 5. .0523	Li6103 610.362 { 55} ppb 2006. 2.	Mg3838 383.826 { 87} ppb 2019. 1.
1 2	< .0000 < .0000	<.0000 <.0000	9675. 9682.	2005.	2020.
lem ine nits vg tddev RSD	Mn2576 257.610 (131) ppb 2004. 2. .0829	Mo2020 202.030 {166} ppb 2029. 36. 1.759	Na5889 588.995 { 57) ppb 1817. 1. .0557	Na5895 589.592 { 57} ppb 1836. 4. -2004	Ni2316 231.604 {145} ppb 2091. 5. 2272
1 2	2003. 2005.	2003. 2054.	1817. 1818.	1833. 1838.	2088.
lem ine iits 7g idde <del>v</del> KSD	Os2255 225.585 (149) ppB 31.30 .35 1.127	Pb2203 220.353 {152} ppb 2142. 2. .0745	Pd3242 324.270 {103} ppb 2091. 3289. 157.3	Pt2036 203.646 {164} ppb 373.2 30.3 8.123	2095. Pt2144 214.423 {156} ppb <.0000 66.45 3 474
2	31.55 31.05	2141. 2143.	4417. < .000	351.8 394.6	<.0000 <.0000
Sample Name: CCV-7 Run Time: 07/18/07 18:30

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	1987.	2003.	3927.	2017.
Stddev	.1302	35.	7.	23.	3.
&RSD	4.721	1.747	.3633	.5850	.1249
#1	<.0000	1962.	1998.	3911.	2015.
#2	<.0000	2011.	2008.	3943.	2019.
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	2029.	22.34	<.0000	<.0000	1987.
Stddev	5.	5.83	3.112	.4281	5.
%RSD	.2259	26.08	1.019	13.65	.2555
#1	2032.	26.46	<pre>&lt; .0000</pre>	<.0000	1983.
#2	2025.	18.22	< .0000	<.0000	1990.
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 (157)	339.196 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	1996.	<.0000	2042.	1.007	
Stddev	3.	6.381	6.	.594	
%RSD	.1642	.6865	.2871	58.99	
#1	1994.	< .0000	2038.	.5871	
#2	1998.	< .0000	2046.	1.427	

-	L -				U	//TR/0,	/ 18:34:1	.3	pa	ae 1	
Method: SI Comment:	PEX	Samp	le Name	≥: CCB-7			Ope	rator:	Fai	90 I	
Run Time:	07/18/0	07 18::	33 Туре	≥: Unk	Мос	ie: CON	IC Co	rr.Fact:	1.00000	00	
Elem Line Units		328.068	Ag3280 {102} ppb	308.2	Al308 15 (109 PP	12  } 396  b	A139 .152 { 8	61 5} 193.7	As193 759 (173	37 3) 242.79	Au2427 95 {138}
Rvg Stddev &RSD			<.0000 .5460 318.4	1	13.7 2.5 18.8	4 9 7	<.00 .44 18.0	00 82 61	.557 .025 4.64	5 9 6	ppb <.0000 .0771 13.67
₩2			.2146 <.0000		11.9 15.5	1 8	<.000 <.000	00 00	.539 .575	2 8	<.0000
Elem Line Units Avg Stddev %RSD	:	249.678	B_2496 {135} ppb .2440 .1054 43.18	493.40	Ba493 9 { 68 ppl .0368 .0583	4 } 313. 3	Be313 .042 (107 PF <.000 .027	30 7] 190.2 55 90 78	Bi190 41 {176 ppr <.0000 1.212	2 } 317.93 m 0 2	Ca3179 3 {105} ppb 3.756 1 532
#1 ⊭2			.3185 .1695		<.0000	) )	36.6	0	89.65	7	40.79
Elem Line Jnits Vyg Etddev	2	c 28.802 <	Cd2288 {147} ppb .0000 .0088	228.61	Co2286 5 {147} .0950 .0448	357.	Cr357 869 ( 94 ppl <.0000 3.200	8 ] 324.75 b 0 5	<ul> <li>Cu3247</li> <li>Gu3247</li> <li>4 {103}</li> <li>ppb</li> <li>.8443</li> <li>0495</li> </ul>	259.940	2.673 Fe2599 (129) ppb .3165
1 2		<	.0000		47.15		123.8	3	.8793		.0315 9.946 .2943
lem ine nits vg tddev RSD	20	G 06.866 <	e2068 {162} ppm .0000 2.719 154.3	230.606	In2306 {146} ppb .1673 .2535 151.5	766.4	K_7664 190 { 44} ppb <.0000 1.367	610.36	.8093 Li6103 2 { 55} ppb 7.761 .099	3B3.826	.3388 Mg3838 { 87} ppb 2.750 2.917
1 2		< .	1602 0000		<.0000		<.0000 <.0000		1.280 7.691 7.831		106.1
.ne lits 'g .ddev .SD	25	Mn 7.610 ( <. 3	2576 131} ppb 0000 0035 .177	202.030	fo2020 {166} ppb .2360 .0194 8.216	588.9	Na5889 95 { 57} ppb <.0000 .3062 10.40	589.592	Na5895 { 57} ppb <.0000 .2058 1.029	N 231.604 <	4.813 (i2316 {145) ppb .0000 .1293 4547.
en ne	225	<. <.) 0s2 5.585 / 1	0000 2255	P.20 353	.2223 .2497 b2203		<.0000 <.0000 Pd3242	·	<.0000 <.0000	<	.0000 .0886
its J idev 3D	265	<.( .2 14	ppB 0000 2344 1.38	<20.353 <	(152) ppb .0000 .0657 2.293	324.27	0 {103} ppb <.0000 82.24 141.0	203.646	{164} ppb .0000 23.18	214.423	(156) ppb 2847 5887
		<.0 <.0	000	<. <.	0000	< <	.0000	<	.0000	2 <.	7009 0000

- - - -

+	40-	54
4	1.6	

KIT

				- L 2 -	-
Sample Name:	CCB-7 Run Time:	07/18/07 18:33			I4
Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 [176]
Units	ppb	ppb	ppb	ppb	ppb
Avg	.5523	<.0000	.0655	<.0000	11.87
Stddev	.2069	1.039	.7110	2.101	.04
%RSD	37.46	332.0	1086.	141.8	.2970
#1	.4060	.4218	.5682	< .0000	11.85
#2	.6986	< .0000	<.0000	.0045	11.90
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	5.390	4.152	3.134	<.0000	<.0000
Stddev	1.723	4.014	1.707	.6419	2.281
&RSD	31.97	96.68	54.47	247.6	129.6
#1	6.608	6.990	1.927	<.0000	< .0000
#2	4.171	1.313	4.340	.1946	
Elem	V_2924	₩_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 (140)	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	1.916	<.0000	<.0000	<.0000	
Stddev	.159	.2783	.0207	.5936	
&RSD	8.323	14.95	2.960	50 50	
₹1 †2	1.803 2.028	<.0000 <.0000	<.0000 <.0000	<.0000	

Date: 07/02/2007 Technique: FI-MHS Calibration Type: Hg, Zero Intercept: Nonlinear Wavelength: 253.7 nm Results Data Set Name: HG-J-49A Sample Info Name: HG-J-49A.SIF Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 07/02/2007 Sample ID: Calib Blank \_\_\_\_\_ ReplSampleConcStndConcBlnkCorrPeakPeakTimePeak#µg/Lµg/LSignalAreaHeightStore10.00020.00110.000202:55:53No20.00010.00020.000102:56:22No Stored 0.0001 Mean: 0.0001 SD : 44.2987 SRSD: Auto-zero performed. Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 07/02/2007 Sample ID: 0.5 ppb ReplSampleConcStndConcBlnkCorrPeakPeak#µg/Lµg/LSignalAreaHeightStored µg/L µg/L 0.0079 0.0390 0.0081 02:57:35 No 0.0085 0.0421 0.0086 02:58:04 No 1 2 0.0082 Mean: 0.0004 SD : SRSD: 4.6854 [Hg] Standard number 1 applied. [0.5000] Correlation Coefficient: 1.00000 Slope: 0.01640 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 07/02/2007 Sample ID: 1.00 ppb 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 0.0165
 0.0807
 0.0166
 02:59:17
 No

 2
 0.0173
 0.0840
 0.0175
 02:59:46
 No
 Repl Mean: 0.0169 0.0006 SD : 3,5208 %RSD: [Hg] Standard number 2 applied. [1.000] Correlation Coefficient: 1.00000 Slope: 0.01592 Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 07/02/2007 Sample ID: 2.00 ppb - ---ReplSampleConcStndConcBlnkCorrPeakPeakTimePeak#µg/Lµg/LSignalAreaHeightStore10.03240.15860.032603:00:59No20.03370.16100.033803:01:28No Stored 0.0331 Mean: 0.0009 SD : 2.7023 %RSD: s-shaped calibration curve detected. Two-coefficient equation used. [Hq] Standard number 3 applied. [2.000] Slope: 0.01659 Correlation Coefficient: 0.99979

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 07/02/2007 Sample ID: 5.00 ppb \_\_\_\_\_\_ 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 0.0818
 0.3946
 0.0819
 03:02:43
 No

 2
 0.0858
 0.4083
 0.0860
 03:03:12
 No
 Stored 0.0838 Mean: 0.0029 SD : %RSD: 3.4243 [Hq] Standard number 4 applied. [5.000] Correlation Coefficient: 0.99998 Slope: 0.01657 Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 07/02/2007 Sample ID: 10.0 ppb \_\_\_\_\_ SampleConc StndConc BlnkCorr Peak Peak Time Peak µg/L µg/L Signal Area Height Stored 0.1649 0.7935 0.1650 03:04:27 No 0.1718 0.8258 0.1719 03:04:56 No Repl # 1 2 Mean: 0.1683 SD : 0.0049 2.8822 %RSD: [Hg] Standard number 5 applied. [10.00] Correlation Coefficient: 0.99999 Slope: 0.01659 \_\_\_\_\_

Calibration data for Hg

		Entered	Calculated		
	Mean Sign	al Concentration	Concentration	n Standard	
Standard ID	(Pk Heigh	t) (µg/L)	(µg/L)	Deviation	%RSD
Calib Blank	0.0001				
0.5 ppb	0.0082	0.5000	0.4938	0.00038	4.7
1.00 ppb	0.0169	1.0000	1.017	0.00059	3.5
2.00 ppb	0.0331	2.0000	1.987	0.00089	2.7
5.00 ppb	0.0838	5.0000	5.011	0.00287	3.4
10.0 ppb	0.1683	10.0000	9.990	0.00485	2.9
Correlation	Coefficient:	0.99999 Slope:	0.01659 -		



Mean: 0.1959 0.1959 0.0033 SD : 0.00531 0.00531 0.0001 %RSD: 2.7 2.7 2.7131 \_\_\_\_\_\_ Element: Hg Seq. No.: 10 AS Loc.: 10 Date: 07/02/2007 Sample ID: 2.0 PPB \_\_\_\_\_ 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 1.915
 1.915
 0.0319
 0.1523
 0.0320
 03:11:19
 No

 2
 2.050
 2.050
 0.0341
 0.1624
 0.0342
 03:11:49
 No

 Mean:
 1.983
 1.983
 0.0330
 SD
 :
 0.09502
 0.0016

 %RSD:
 4.8
 4.8074
 4.8074
 :
 .
 Stored \_\_\_\_\_\_\_ Element: Hg Seq. No.: 11 AS Loc.: 24 Date: 07/02/2007 Sample ID: MB-S \_\_\_\_\_ 

 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 0.0262
 0.0262
 0.0004
 0.0010
 0.0006
 03:13:02
 No

 2
 0.0321
 0.0321
 0.0005
 0.0036
 0.0007
 03:13:31
 No

 Mean:
 0.0292
 0.0292
 0.0005
 SD
 0.00418
 0.0001

 SRSD: 14.3 14.3 14.3117 Element: Hg Seq. No.: 12 AS Loc.: 25 Date: 07/02/2007 Sample ID: LCS-S 0.2/500 \_\_\_\_ 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 3.487
 3.487
 0.0582
 0.2759
 0.0583
 03:14:45
 No

 2
 3.560
 3.560
 0.0594
 0.2810
 0.0595
 03:15:14
 No

 Mean:
 3.523
 3.523
 0.0588
 SD
 0.05163
 0.0009
 \$RSD:
 1.5
 1.4733
 Element: Hg Seq. No.: 13 AS Loc.: 35 Date: 07/02/2007 Sample ID: 070622060-001A 0.2/100 Repl SampleConc StndConc BlnkCorr Peak Peak Time Peak -2 0.0318 0.0318 0.0005 Mean: SD : 0.00321 0.00321 0.0001 10.1 10.1 10.0995 %RSD: Element: Hg Seq. No.: 14 AS Loc.: 36 Date: 07/02/2007 Sample ID: 070622060-002A 0.2/100 \_\_\_\_\_ 

 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 -0.0024
 -0.0024
 0.0000
 -0.0003
 0.0001
 03:18:08
 No

 2
 0.0277
 0.0277
 0.0005
 0.0044
 0.0006
 03:18:37
 No

 Mean:
 0.0127
 0.0127
 0.0002
 SD
 :
 0.02126
 0.0004

 No
 169
 0
 167
 0.027

 Stored %RSD: 168.0 168.0 167.9863

Elemen Sample	nt: Hg Se 1D: 070622	q. No.: 15 060-003A 0	AS .2/100	Loc.: 37	Date:	07/02/2007		
Repl # 2 Mean: SD : %RSD;	SampleConc µg/L 0.0058 -0.0010 0.0024 0.00478 198.0	StndConc µg/L 0.0058 -0.0010 0.0024 0.00478 198.0	BlnkCor Signal 0.0001 0.0000 0.0000 0.0001 198.0370	r Peak Area 0.0009 -0.0026	Peak Height 0.0002 0.0001	Time 03:19:49 03:20:19	Peak Stored No No	
Elemen Sample	t: Hg Se D: 070622	q. No.: 16 060-004A 0.	AS .2/100	Loc.: 38	Date:	07/02/2007	╺╺┶┶┲═┲	
Repl # 1 2 Mean: SD : %RSD:	SampleConc µg/L -0.0002 0.0162 0.0080 0.01158 145.1	StndConc µg/L -0.0002 0.0162 0.0080 0.01158 145.1	BlnkCor Signal 0.0000 0.0003 0.0001 0.0002 145.1332	r Peak Area 0.0000 0.0028	Peak Height 0.0001 0.0004	Time 03:21:31 03:22:00	Peak Stored No No	
Elemen Sample	t: Hg Se ID: 070622	q. No.: 17 060-005A 0.	AS : 2/100	Loc.: 39	Date:	07/02/2007		
Repl # 1 2 Mean: SD : %RSD:	SampleConc µg/L 0.0241 0.0068 0.0154 0.01225 79.5	StndConc µg/L 0.0241 0.0068 0.0154 0.01225 79.5	BlnkCor Signal 0.0004 0.0001 0.0003 0.0002 79.4842	r Peak Area 0.0015 -0.0021	Peak Height 0.0005 0.0002	Time 03:23:13 03:23:42	Peak Stored No No	
Elemen Sample	t: Hg Sea ID: 0706220	q. No.: 18 D60-006A 0.	AS 1 2/100	Loc.: 40	Date: (	07/02/2007		
Repl # 1 2 Mean: SD : %RSD:	SampleConc µg/L 0.0070 0.0072 0.0071 0.00016 2.3	StndConc µg/L 0.0070 0.0072 0.0071 0.00016 2.3	BlnkCorn Signal 0.0001 0.0001 0.0001 0.0000 2.3167	r Peak Area 0.0006 0.0012	Peak Height 0.0002 0.0003	Time 03:24:56 03:25:26	Peak Stored No No	
Elemen: Sample	t: Hg Sec ID: QC Samp	I. No.: 19 Die 1	AS I	Loc.: 4	Date: 07	7/02/2007		**********
Repl # 1 2 Mean: SD : %RSD: QC valu	SampleConc µg/L 1.908 2.001 1.955 0.06618 3.4 ue within sp	StndConc µg/L 1.908 2.001 1.955 0.06618 3.4 pecified lin	BlnkCorr Signal 0.0317 0.0333 0.0325 0.0011 3.3959 mits.	Peak Area 0.1524 0.1585	Peak Height 0.0319 0.0334	Time 03:26:40 03:27:09	Peak Stored No No	· · · · · · · · · · · · · · · · · · ·
Element Sample	: Hg Seq ID: QC Samp	[. No.: 20 le 2	AS 1	.oc.: 1	Date: 07	/02/2007		

Repl # 2 Mean: SD : %RSD: QC va]	SampleCond µg/L 0.0113 0.0173 0.0143 0.00422 29.6 Lue within s	<pre>StndConc µg/L 0.0113 0.0173 0.0143 0.00422 29.6 specified 1:</pre>	BlnkCo. Signal 0.0002 0.0003 0.0002 0.0001 29.5792 imits.	rr Peak Area 0.0012 0.0029	Peak Height 0.0003 0.0004	Time 03:28:22 03:28:53	Peak Stored 2 No 1 No	
Elemer Sample	nt: Hg Se 2 ID: 070622	q. No.: 21 2060-007A 0.	AS .2/100	Loc.: 41	Date:	07/02/2007		
Repl # 1 2 Mean: SD : %RSD:	SampleConc µg/L -0.0155 -0.0021 -0.0088 0.00948 107.8	<pre>stndConc µg/L -0.0155 -0.0021 -0.0088 0.00948 107.8</pre>	BlnkCon Signal -0.0003 0.0000 -0.0001 0.0002 107.7910	r Peak Area -0.0047 -0.0015	Peak Height -0.0001 0.0001	Time 03:30:04 03:30:33	Peak Stored No No	
Elemen Sample	t: Hg Se ID: 070622	q. No.: 22 060-008A 0.	AS 2/100	Loc.: 42	Date: (	07/02/2007		
Repl # 1 2 Mean: SD : %RSD:	SampleConc µg/L 0.0064 0.0328 0.0196 0.01866 95.3	StndConc µg/L 0.0064 0.0328 0.0196 0.01866 95.3	BlnkCor Signal 0.0001 0.0005 0.0003 0.0003 95.3130	r Peak Area -0.0005 0.0049	Peak Height 0.0002 0.0007	Time 03:31:48 03:32:18	Peak Stored No No	
Elemen Sample	t: Hg Sea ID: 0706220	q. No.: 23 060-009A 0.	AS 2/100	Loc.: 43	 Date: 0	07/02/2007		
Repl # 2 Mean: SD : %RSD:	SampleConc µg/L 0.0112 0.0164 0.0138 0.00368 26.6	StndConc µg/L 0.0112 0.0164 0.0138 0.00368 26.6	BlnkCor Signal 0.0002 0.0003 0.0002 0.0001 26.5772	r Peak Area 0.0021 0.0027	Peak Height 0.0003 0.0004	Time 03:33:32 03:34:01	Peak Stored No No	
Element Sample	: Hg Sec ID: 0706220	1. No.: 24 060-010A 0.2	AS 1 2/100	Loc.: 44	Date: 0	7/02/2007		== <u>=</u> ============
Repl # 2 Mean: SD : %RSD:	SampleConc µg/L -0.0030 0.0201 0.0086 0.01634 190.0	StndConc µg/L -0.0030 0.0201 0.0086 0.01634 190.0 ]	BlnkCorr Signal 0.0000 - 0.0003 0.0001 0.0003 L90.0470	Peak Area -0.0003 0.0030	Peak Height 0.0001 0.0005	Time 03:35:16 03:35:45	Peak Stored No No	
Element Sample	: Hg Seq ID: 0706220	. No.: 25 60-010A DP	AS I 0.2/100	oc.: 45	Date: 01	7/02/2007	=======;	
Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	 Peak Stored	

Perkin-Elmer AAWinLab: 07/02/2007, 03:27:32 PM

0.0009 0.0009 0.0000 -0.0007 0.0001 03:37:01 No 1 0.0171 0.0171 0.0003 0.0033 0.0004 03:37:30 No 2 Mean: 0.0090 0.0090 0.0001 SD : 0.01149 0.01149 0.0002 %RSD: 127.8 127.8 127.8 127.8 127.8 127.8 127.8248 %RSD: Element: Hg Seq. No.: 26 AS Loc.: 46 Date: 07/02/2007 Sample ID: 070622060-010A MS 0.2/100 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 1.996
 1.996
 0.0332
 0.1612
 0.0334
 03:38:46
 No

 2
 2.033
 2.033
 0.0338
 0.1608
 0.0340
 03:39:15
 No

 Mean:
 2.015
 2.015
 0.0335
 SD
 0.02620
 0.0004
 \$RSD: 1.3 1.3 1.3046 Element: Hg Seq. No.: 27 AS Loc.: 47 Date: 07/02/2007 Sample ID: 070622060-011A 0.2/100 Repl SampleConc StndConc BlnkCorr Peak Peak Time Peak 
 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stor

 1
 0.5025
 0.5025
 0.0083
 0.0372
 0.0085
 03:40:31
 No

 2
 0.5229
 0.5229
 0.0087
 0.0417
 0.0088
 03:41:01
 No

 Mean:
 0.5127
 0.5127
 0.0085
 5D
 0.01446
 0.0002
 Stored 2.8 2.8 2.8221 %RSD: \_\_\_\_\_ Element: Hg Seq. No.: 28 AS Loc.: 48 Date: 07/02/2007 Sample ID: 070622060-012A 0.2/100 -ReplSampleConcStndConcBlnkCorrPeakTimePeak#µg/Lµg/LSignalAreaHeightStored10.38280.38280.00640.03210.006503:42:15No20.39230.39230.00650.03100.006603:42:44NoMean:0.38760.38760.0064SD:0.006720.00018RSD:1.71.71.7338 Element: Hg Seq. No.: 29 AS Loc.: 49 Date: 07/02/2007 Sample ID: 070622060-013A 0.2/100 -ReplSampleConcStndConcBlnkCorrPeakPeak#µg/Lµg/LSignalAreaHeightStored 

 I
 1.394
 1.394
 0.0232
 0.1128
 0.0233
 03:43:54
 No

 2
 1.410
 1.410
 0.0234
 0.1131
 0.0236
 03:44:23
 No

 Mean:
 1.402
 1.402
 0.0233
 0.1131
 0.0236
 03:44:23
 No

 SD
 0.01161
 0.01161
 0.0002
 8RSD:
 0.8
 0.8299

 Element: Hg Seq. No.: 30 AS Loc.: 50 Date: 07/02/2007 Sample ID: 070622060-014A 0.2/100 ReplSampleConcStndConcBlnkCorrPeakPeakTimePeak#µg/Lµg/LSignalAreaHeightStored10.48580.48580.00810.03890.008203:45:33No20.49930.49930.00830.03990.008403:46:02NoMean:0.49260.49260.0082

Perkin-Elmer AAWinLab: 07/02/2007, 03:37:01 PM

0.0002 SD : 0.00957 0.00957 %RSD: 1.9 1.9 1.9437 Element: Hg Seq. No.: 31 AS Loc.: 4 Date: 07/02/2007 Sample ID: QC Sample 1 Stored QC value within specified limits. Element: Hg Seq. No.: 32 AS Loc.: 1 Date: 07/02/2007 Sample ID: QC Sample 2 - 

 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 0.0029
 0.0029
 0.0000
 0.0003
 0.0002
 03:48:56
 No

 2
 0.0197
 0.0197
 0.0003
 0.0034
 0.0005
 03:49:25
 No

 Mean:
 0.01187
 0.01187
 0.0002
 SD
 :
 0.01187
 0.0002

 %RSD:
 105.0
 105.0
 105.0193
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
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 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 : Stored QC value within specified limits. Element: Hg Seq. No.: 33 AS Loc.: 51 Date: 07/02/2007 Sample ID: 070622060-014A DP 0.2/100 - 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 0.6595
 0.6595
 0.0110
 0.0555
 0.0111
 03:50:36
 No

 2
 0.6517
 0.6517
 0.0108
 0.0520
 0.0110
 03:51:05
 No

 Mean:
 0.6556
 0.6556
 0.0109
 SD
 0.00553
 0.0001
 %RSD:
 0.8
 0.8437
 Element: Hg Seq. No.: 34 AS Loc.: 52 Date: 07/02/2007 Sample ID: 070622060-014A MS 0.2/100 - 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 2.430
 2.430
 0.0405
 0.1978
 0.0406
 03:52:17
 No

 2
 2.493
 2.493
 0.0415
 0.2013
 0.0417
 03:52:47
 No

 Mean:
 2.462
 2.462
 0.0410
 SD
 0.04438
 0.0007

 %RSD:
 1.8
 1.8
 1.8096
 0.0007
 Element: Hg Seq. No.: 35 AS Loc.: 53 Date: 07/02/2007 Sample ID: MB-S 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 0.0102
 0.0102
 0.0002
 0.0014
 0.0003
 03:53:59
 No

 2
 0.0244
 0.0244
 0.0004
 0.0015
 0.0005
 03:54:29
 No

 Mean:
 0.0173
 0.0173
 0.0003
 0003
 0003
 0003
 0003
 0003
 00003
 0003
 0003
 0003
 0003
 0003
 0003
 0003
 0003
 0003
 0003
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 0003
 Stored SD : 0.01009 0.01009 0.0002

58.3 58.3 58.3270 %RSD: Element: Hg Seq. No.: 36 AS Loc.: 54 Date: 07/02/2007 Sample ID: LCS-S 0.2/500 - 

 z
 3.270
 0.0545
 0.2615
 0.0547
 03:55:41
 No

 2
 3.289
 3.289
 0.0548
 0.2638
 0.0550
 03:55:41
 No

 Mean:
 3.279
 3.279
 0.0547
 03:55:10
 No

 SD
 0.01356
 0.01356
 0.0002
 %RSD:
 0.4
 0.4
 0.4355

 ReplSampleConcStndConcBlnkCorrPeakTimePeak#µg/Lµg/LSignalAreaHeightStored13.2703.2700.05450.26150.054703:55:41No2220.05400.05400.05500.055002:55:41No Element: Hg Seq. No.: 37 AS Loc.: 55 Date: 07/02/2007 Sample ID: 070702007-001A 0.2/100 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 0.0980
 0.0016
 0.0076
 0.0018
 03:57:22
 No

 2
 0.1080
 0.1080
 0.0018
 0.0094
 0.0019
 03:57:51
 No

 Mean:
 0.1030
 0.1030
 0.0017
 SD
 :
 0.00707
 0.0001
 Stored 6.9 6.9 6.8633 %RSD: Element: Hg Seq. No.: 38 AS Loc.: 56 Date: 07/02/2007 Sample ID: 070702007-001A DP 0.2/100 \_\_\_\_\_ 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 0.1328
 0.1328
 0.0022
 0.0129
 0.0023
 03:59:03
 No

 2
 0.1292
 0.1292
 0.0021
 0.0108
 0.0023
 03:59:32
 No

 Mean:
 0.1310
 0.1310
 0.0022
 SD
 :
 0.00256
 0.0000
 \$RSD:
 2.0
 2.0
 1.9563
 Stored Element: Hg Seq. No.: 39 AS Loc.: 57 Date: 07/02/2007 Sample ID: 070702007-001A MS 0.2/100 

 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 2.067
 2.067
 0.0344
 0.1645
 0.0345
 04:00:46
 No

 2
 2.122
 2.122
 0.0353
 0.1687
 0.0355
 04:01:15
 No

 Mean:
 2.094
 2.0342
 0.0007
 3942
 0.0007
 3961

 Stored 1.9 1.9 1.8881 SRSD: Element: Hg Seq. No.: 40 AS Loc.: 58 Date: 07/02/2007 Sample ID: MB-TCLP ReplSampleConcStndConcBlnkCorrPeakTimePeak#µg/Lµg/LSignalAreaHeightStored10.01820.01820.00030.00190.000404:02:29No 
 """
 """
 """"
 """""
 """"""
 Signal
 Area
 Height
 Sto:

 1
 0.0182
 0.0182
 0.0003
 0.0019
 0.0004
 04:02:29
 No

 2
 -0.0003
 -0.0003
 0.0000
 -0.0021
 0.0001
 04:02:58
 No

 Mean:
 0.01306
 0.01306
 0.0002
 -0.0002
 -0.0002
 -0.0002
 -0.0002
 -0.0002
 -0.0002
 -0.0002
 -0.0002
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 -0.0002
 -0.0002
 -0.0002
 -0.0002
 -0.0002
 -0.0002
 %RSD: 145.9 145.9 145.9018

\_\_\_\_\_\_

Element: Hg Seq. No.: 41 AS Loc.: 59 Date: 07/02/2007 Sample ID: LCS-TCLP \_\_\_\_\_ 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 1.543
 1.543
 0.0257
 0.1264
 0.0258
 04:04:13
 No

 2
 1.590
 1.590
 0.0265
 0.1293
 0.0266
 04:04:41
 No

 Mean:
 1.567
 1.567
 0.0261
 SD
 :
 0.03348
 0.0006

 %RSD:
 2.1
 2.1
 2.1419
 :
 1419
 Stored Element: Hg Seq. No.: 42 AS Loc.: 60 Date: 07/02/2007 Sample ID: 070622062-003A TCLP 1/5 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 0.0110
 0.0110
 0.0002
 0.0008
 0.0003
 04:05:55
 No

 2
 0.0141
 0.0102
 0.0017
 0.0004
 04:06:25
 No

 Mean:
 0.0125
 0.0125
 0.0002
 SD
 :
 0.00222
 0.0000
 %RSD: 17.7 17.7358 Element: Hg Seq. No.: 43 AS Loc.: 4 Date: 07/02/2007 Sample ID: QC Sample 1 

 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 1.797
 1.797
 0.0299
 0.1474
 0.0300
 04:07:40
 No

 2
 1.911
 1.911
 0.0318
 0.1561
 0.0319
 04:08:09
 No

 Mean:
 1.854
 1.854
 0.0309
 SD :
 0.08020
 0.0013
 8RSD:
 4.3
 4.3377

 9C
 write
 write
 stored
 ified
 ified
 ified

 OC value within specified limits. Element: Hg Seq. No.: 44 AS Loc.: 1 Date: 07/02/2007 Sample ID: QC Sample 2 

 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 0.0037
 0.0037
 0.0001
 0.0004
 0.0002
 04:09:21
 No

 2
 0.0112
 0.0112
 0.0002
 0.0017
 0.0003
 04:09:50
 No

 Mean:
 0.0074
 0.0074
 0.0001
 SD
 0.00531
 0.0001

 %RSD:
 71.6
 71.6
 71.6331
 0.0001

 OC value within specified limits. \_\_\_\_\_\_ Element: Hg Seq. No.: 45 AS Loc.: 61 Date: 07/02/2007 Sample ID: 070625012-001A TCLP 1/5 ReplSampleConcStndConcBlnkCorrPeakTimePeak#ug/Lug/LSignalAreaHeightStored 
 Height
 High
 High
 High
 Height
 Stor

 1
 0.0125
 0.0125
 0.0002
 0.0019
 0.0003
 04:11:04
 No

 2
 -0.0057
 -0.0057
 -0.0001
 -0.0152
 0.0000
 04:11:33
 No

 Mean:
 0.0034
 0.0034
 0.0001
 SD
 0.01287
 0.01287
 0.0002
 381.7 381.7 381.6470 %RSD: Element: Hg Seq. No.: 46 AS Loc.: 62 Date: 07/02/2007

**Adirondack Environmental Services, Inc** 

PREP BATCH REPORT

Page: 1 of 2

6/29/2007 8:49:00	6/29/2007 8:49:00
Prep Start Date:	Prep End Date:

Prep Factor Unlts: mL / g

Prep Batch 14882	Prep Code:	3050_1	Technician: Keith	Hammecker	Ш.	e/ 9		Î
Sample ID	Aatrix p	H Res (	CI SampAmt	Sol Added	⁻in Vol fao	ctor Prep\$	Start Pr	epEnd
070620006-008A	Sol	No	-	0	200 20	0.000 6/29/	2007 6	/29/2007
070620086-001A	Soil	No	~	0	200 20	0.000 6/29/	2007 E	/28/2007
070822009-004A	Soil	No		0	200 20	0.000 6/29/	2007	129/2007
070622009-005A	Soil	No	-	0	200 20	0.000 6/29/	2007	/29/2007
070622009-006A	Soil	No	-	0	200 20	0.000 8/29/	2007 6	129/2007
070622009-006AMS	Soil	No	-	0	200 20	0.000 6/29,	2007	128/2007
070622008-008AMSD	Soll	Ñ	-	0	200 20	0.000 6/29	2007 E	/29/2007
070822008-007A	Soll	No	-	0	200 20	0.000 6/29	2007	/29/2007
070622060-001A	Sol	N	-	D	200 20	0.000 6/29	2007	129/2007
070822060-002A	Soil	No		0	200 20	0.000 6/29	2007	/28/2007
070822080-003A	Soil	No	-	0	200 20	0.000 8/29.	2007	/29/2007
070622060-004A	Soil	No	-	0	200 20	0.000 6/29,	2007	/29/2007
070622060-005A	Soil	No	-	0	200 20	0.000 6/29	2007	/28/2007
070622060-008A	Sall	No	-	0	200 20	0.000 6/29.	2007	129/2007
070622060-007A	Soll	Ñ	-	0	200 20	0.000 6/29	2007 €	129/2007
070622060-008A	Soil	Ñ	4	0	200 20	0.000 8/29	/2007 E	129/2007
070622060-009A	Soll	ę	-	0	200 20	0.000 6/29	2007 (	/29/2007
070622060-010A	Soll	No.	-	D	200 20	0.000 6/29	2007	/29/2007
070822060-010AMS	Soll	No	-	0	200 20	0.000 6/29	2007 (	/29/2007
070822060-010AMSD	Soil	Š		D	200 20	0.000 6/29	/2007 (	/29/2007
Number	eagent Name		Spk ID	Spike Nam	0	SampTyp	e AmtAdd	
1267 Nitric Acid			MT-LCSS	ERAS044540				0
			MT-SPIKE-icp-2	HP519215				0

StopTime\_

HotBlock/Bath Temp\_ BathSlartTime:\_\_\_\_

# PREP BATCH REPORT

Page:2 of 2

Prep Start Date: 6/29/2007 8:49:00 Prep End Date: 6/29/2007 8:49:00

Prep Factor Unlts: mL / g

Prep Batch	14882	Prep Code:	3050	_	Technician: Keith	Hammecker		mL/g		
Sample ID	M	atrix	На	Res Cl	SampAmt	Sol Added	FIn Vol	factor	PrepStart	PrepEnd
070622080-011A		Soil		Ŷ	-	0	200	200.000	8/29/2007	6/29/2007
070622060-012A		Soll		No	-	0	200	200.000	6/29/2007	6/29/2007
070622060-013A		Soll		No	<b>~</b>	o	200	200.000	6/29/2007	6/29/2007
070822080-014A		Soil		No	-	0	200	200.000	6/29/2007	6/29/2007
070822060-014A	MS	Soll		No	-	0	200	200.000	6/29/2007	6/28/2007
070622080-014AI	MSD	Soil		No	-	0	200	200.000	6/29/2007	6/29/2007
070829013-001A		Soll		No	1	0	200	200.000	6/29/2007	6/29/2007
070829013-001Al	DP	Soil		No	-	0	200	200.000	6/29/2007	6/29/2007
070829013-001A	MS	Soil		No	÷	0	200	200.000	6/29/2007	6/29/2007
LCS-14882				No	1	0	200	200.000	6/29/2007	6/28/2007
MB-14862				No	-	0	200	200.000	6/29/2007	6/29/2007

N and a set		2-1-0	The Martin Martin		F	A LA .f.	5
Number	Keagent Name		spike Nan	ne	sampiype	AmtAdd	
1267	Nitric Acid	 MT-LCSS	ERAS044540			D	
		MT-SPIKE-icp-2	HP519215			0	
			HolBlock/Balh Temp	ŗ			

SlopTime

BathStartTime:

Adirondack Environmental Services, Inc

**PREP BATCH REPORT** 

Page: 1 of 2

6/29/2007 8:50:18	6/29/2007 8:50:18
Prep Start Date:	Prep End Date:

Prep Factor Units:

Prep Batch 14883	Prep Code:	HG PRE	P_S	Technician: Keith	Hammecker		mL/8		
Sample ID	Matrix	pH Re	es Cl	SampAmt	Sol Added	Fin Vol	factor	PrepStart	PrepEnd
070620008-008A	Soil		9	0.2	o	100	500.000	6/28/2007	6/29/2007
070620086-001A	Soil		No	0.2	0	100	500.000	6/28/2007	6/29/2007
070622009-004A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070822009-005A	Soli		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070622009-006A	Soil	2	No	0.2	o	100	500.000	6/28/2007	6/29/2007
070622009-006AMS	Soll		٩ ۷	0.2	0	100	500.000	6/29/2007	6/28/2007
070622009-008AMSD	Soil	-	٩ N	0.2	0	100	500.000	6/29/2007	6/29/2007
070622060-001A	Soil		PA No	0.2	٥	100	500,000	6/29/2007	6/29/2007
070622060-002A	Soll		No	0.2	0	100	500.000	6/29/2007	6/28/2007
070622060-003A	Soil		No	0.2	0	100	500.000	6/29/2007	6/28/2007
070822060-004A	Sail		No	0.2	0	100	500.000	6/28/2007	6/29/2007
070622060-005A	Soll		٩	0.2	0	100	500.000	6/29/2007	6/28/2007
070622060-008A	Soll		٩	0.2	0	100	500,000	6/29/2007	6/29/2007
070622060-007A	Soil		No N	0.2	0	100	500,000	6/28/2007	6/28/2007
070622060-008A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070622060-009A	Soll		No	0.2	0	10	500,000	6/29/2007	6/29/2007
070622060-010A	Soil		No	0.2	0	100	500.000	6/29/2007	6/28/2007
070622060-010AMS	Soil		No	0.2	0	100	500.000	6/29/2007	6/28/2007
070622060-010AMSD	Soil		No	0.2	0	100	500.000	6/29/2007	6/28/2007
070622080-011A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
Number	Reagent Name			Spk ID	Spik	e Name		SampType	AmtAdd
1217 H2SO4-m	etais			MT-LCSS	ERAS044540				0
1232 KMnO4				MT-SPIKE-HG	SP060509A				0
1256 Potassiun	h Persulfate-5%-meta	s							
1267 Nitric Acid									

HolBlock/Bath Temp\_\_\_\_CtopTime.

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# PREP BATCH REPORT

Page: 2 of 2

8:50:18	8:50:18
6/29/2007	6/29/2007
Start Date:	End Date:
Prep	Prep

Prep Factor Units: mL / g

Prep Batch 148	183 Prep Cot	Je: HG F	PREP_S	Technician: Keith	Hammecker		mL/g		
Sample ID	Matrix	Н	Res CI	SampAmt	Sol Added	Fin Vol	factor	PrepStart	PrepEnd
070622060-012A	Solf		Ň	0.2	0	100	500.000	6/29/2007	6/29/2007
070822060-013A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070622060-014A	Soil		°N N	0.2	0	100	500.000	6/29/2007	6/29/2007
070622060-014AMS	Solt		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070622060-014AMSD	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070629013-001A	Solt		ę	0.2	0	100	500.000	6/29/2007	0/20/2007
070629013-001ADP	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070629013-001AMS	Soll		Ño	0.2	O	100	500.000	6/29/2007	6/28/2007
LCS-14883			No	0.2	0	100	500.000	6/29/2007	6/28/2007
MB-14883			No	÷	o	100	100.000	6/28/2007	6/29/2007

AmtAdd	0	0					
SampType							1
e Name					Ç.	د ا	StopTime
Spike	ERAS044540	SP060509A			JelDiech/Delb Tomo		BathStartTime:
Spk ID	MT-LCSS	MT-SPIKE-HG			-		
Reagent Name	H2SO4-metals	KMnO4	Potassium Persulfate-5%-metals	Nitric Acid			
Number	1217 H	1232 K	1256 F	1267 N			

OMOUSE Earth	Sci	ence Cl	10			44
Sample	Tin	Tone	Scimper Tore	Final WY	9 moisen	Dare/Int
070622060-1A	E-A	1-2842	816008	6.9617	22-4	7/18/07 12
	Z-B	1-2896	8-3245	6-78-10	21-4	
-3A	2-3	1-2774	18-7040	1.0985	21-6	
A	9-3	1-2408	9-4573	7.5481	23-4	
-5A	5-5	1.2828	8-36-16	8-1331	3.23	
-lo A	EF	1-2841	10-7542	85616	23-2	
9-7A	E-G	1-2791	18-4879	6,8189	23.3	
-84	EH	1-2816	9-2514	7-4361	22-8	
-9,4	E-I	1-2870	10-3109	8.0631	24-4	
-10/A	5-1	1-287Z	9-4551	7.5464	23-4	
HOcup	EK	1-2884	9-8691	8-0242	21.5	
-110	E-L	1-2815	8-325Z	(6400	23-21	
-12A	Em	1-2780	8.5655	7.1001	20-1	
-13/7	E-N	1-2861	8-4111	(12183	29.4	
-14A	2-0	1-2875	8-2865	(	20-1	
-Mario	ETP	1-2849	8-2735	6-3388	20-5	
		· · · ·				
	<b> </b>					
	<b> </b>					
					┝━┼─┼─┣	
					┝━╍┼╍┢	
					20018	3



Experience is the solution

314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

Earth Science Engineering 3271 Main Street Willsboro, New York 12996

Attention: Douglas Ferris



**Experience is the solution** 314 North Pearl Street • Albany, New York 12207 • 800-848-4983 • (518) 434-4546 • Fax (518) 434-0891

## TITLE PAGE

On June 22, 2007 seven water samples were received by Adirondack Environmental Services, Inc. from Earth Science Engineering at the Black Ash Pond - Willsboro site. These samples were analyzed for Metals and Conventionals in accordance with methodology as detailed by the contract. The project was completed on September 4, 2007.

Orale.

Laboratory Manager

Date:  $\frac{?/4/07}{}$ 



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# SAMPLE DATA

# SUMMARY PACKAGE

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Customer	Laboratory	*VOA	*BNA	*PCB	*Pest	*Metals	*Other
Sample	Sample	GC/MS	GC/MS	GC	GC		CN
Code	Code	Method	Method	Method	Method		
SW-1-SU-7	070622041-001					x	
SW-2-SU-7	070622041-002					X	X
SW-3-SU-7	070622041-003				1	X	Х
SW-6-SU-7	070622041-004					X	X
SW-9-SU-7	070622041-005					X	X
SW-10-SU-7	070622041-006					X	X
SW-11-SU-7	070622041-007					x	X

# SAMPLE IDENTIFICATION AND ANALYTICAL REQUIREMENT SUMMARY

### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Laboratory	1		Date Rec'd	Date	Date
Sample ID	Matrix	Metals Requested	at Lab	Prepared	Analyzed
070622041-001	WATER	ICP	6/22/07	6/26/07	7/18/07
		Mercury		6/26/07	6/27/07
		Cyanide	6/22/07	7/2/07	7/5/07
		рН			6/22/07
		Turbidity			6/22/07
070622041-002	WATER	ICP	6/22/07	6/26/07	7/18/07
		Mercury		6/26/07	6/27/07
		Cyanide	6/22/07	7/2/07	7/5/07
		pH			6/22/07
		Turbidity			6/22/07
070622041-003	WATER	ICP	6/22/07	6/26/07	7/18/07
		Mercury		6/26/07	6/27/07
		Cyanide	6/22/07	7/2/07	7/5/07
		_ pH			6/22/07
		Turbidity			6/22/07
070622041-004	WATER	ICP	6/22/07	6/26/07	7/18/07
		Mercury		6/26/07	6/27/07
		Cyanide	6/22/07	7/2/07	7/5/07
		pH			6/22/07
		Turbidity			6/22/07
070622041-005	WATER	ICP	6/22/07	6/26/07	7/18/07
		Mercury		6/26/07	6/27/07
		· · · · ·			
		Cyanide	6/22/07	7/2/07	7/5/07
		рН			6/22/07
		Turbidity			6/22/07
070622041-006	WATER	ICP	6/22/07	6/26/07	7/18/07
		Мегсигу		6/26/07	6/27/07
		Cyanide	6/22/07	7/2/07	7/5/07
		pH			6/22/07
		Turbidity			6/22/07

#### SAMPLE PREPARATION AND ANALYSIS SUMMARY INORGANIC ANALYSES

#### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

#### SAMPLE PREPARATION AND ANALYSIS SUMMARY INORGANIC ANALYSES

Laboratory			Date Rec'd	Date	Date
Sample ID	Matrix	Metals Requested	at Lab_	Prepared	Analyzed
070622041-007	WATER	ICP	6/22/07	6/26/07	7/18/07
		Mercury		6/26/07	6/27/07
		Cyanide	6/22/07	7/2/07	7/5/07
		pH			6/22/07
		Turbidity			6/22/07



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#### Case Narrative

#### Client: Earth Science Engineering - Black Ash Pond / Willsboro

Case: ESE 0701

SDG: SW-1-SU-7

Sample ID	Laboratory Sample ID	Date Received	<u>VTSR</u>	<u>Matrix</u>
SW-1-SU-7	070622041-001	06/22/07	12:14	Water
SW-2-SU-7	070622041-002	06/22/07	12:14	Water
SW-3-SU-7	070622041-003	06/22/07	12:14	Water
SW-6-SU-7	070622041-004	06/22/07	12:14	Water
SW-9-SU-7	070622041-005	06/22/07	12:14	Water
SW-10-SU-7	070622041-006	06/22/07	12:14	Water
SW-11-SU-7	070622041-007	06/22/07	12:14	Water

#### **Inorganics – Metals**

- 1) The water samples received on 6/22/07 had a temperature of 11 °C.
- 2) The recovery for Aluminum, Calcium and Iron in the ICSA and the ICSAB check standards were outside the required limit. The required concentration for these analytes in the check standards is 500,000 ug/L and 200,000 ug/L, respectively. The linear range on this instrument for Aluminum, Calcium and Iron is 250,000 ug/L, 200,000 ug/L and 80,000 ug/L, respectively. At this level accurate recovery of Aluminum, Calcium and Iron in the check standards is not possible. No further action is required.
- 3) The digested spike recovery for the element Mercury on sample SW-11-SDU-7 (AES sample number 070622041-007) was outside the required 75-125 % limits. The results for this element are flagged with an "N" as specified by the protocol. This indicates possible matrix interference.
- 4) The elements Calcium, Magnesium, Manganese and Sodium for sample SW-11-SDU-7 (AES sample number 070622041-007) did not meet the serial dilution criteria of 10 %. These elements are flagged with an "E" as required by the protocol. The "E" denotes an estimated value. This indicates a possible chemical or physical interference.

#### Conventionals

- 1) The water samples were analyzed for only for pH, Turbidity and Cyanide.
- 2) Sample SW-11-SDU-7 (AES sample number 070622041-007) was used for the water matrix spike and the duplicate analysis. All recoveries were within acceptable limits.

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# INORGANIC ANALYSES DATA SHEET

		non		JUI DEG DA	ATA SHEET		E	A SAMPLE NO.	
								SW-1-SU-7	
Lab Name:	Adirondack En	vironmental	Com	tract:	Black Ash	Pond			_
Lab Code:	AES	Case No.: ES	B 0701	SAS No.:		SDG	No.:	SW-1-SU-7	
Matrix (soil,	/water): WA	TER		Lab	Sample ID:	0706	22041-	001A	
Level (low/ma	ed): LOW			Date	a Received:	6/22	2/2007		

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight):

**UG/L** 

CAS No.	Analyte	Concentration		Q	M
7429-90-5	Aluminum	79.3	В		P
7440-36-0	Antimony	54.2	B		P
7440-38-2	Arsenic	7.3	В	Γ	P
7440-39-3	Barium	6.9	В		P
7440-41-7	Beryllium	0.30	ש		P
7440-43-9	Cadmium	0.50	ם		P
7440-70-2	Calcium	17600		E	P
7440-47-3	Chromium	2.7	סן	1	P
7440-48-4	Cobalt	0.90	שן	1	P
7440-50-8	Copper	3.0	B		P
7439-89-6	Iron	234			P
7439-97-6	Mercury	0.21		N	cv
7439-92-1	Lead	1.6	סן		P
7439-95-4	Magnesium	4280	в	E	P
7439-96-5	Manganese	18.7	[	E	P
7440-02-0	Nickel	0.90	ש		P
7440-09-7	Potassium	789	В		P
7782-49-2	Selenium	8.4			P
7440-22-4	Silver	1.8	ש	1	P
7440-23-5	Sodium	6870		E	P
7440-28-0	Thallium	6.9	В		P
7440-62-2	Vanadium	4.2	ש		P
7440-66-6	Zinc	3.7	B		P

Color Before:	 Clarity Before:	 Texture:	 
Color After:	 Clarity After:	 Artifacts:	 
Comments:		 	

# USEPA - CLP

#### INORGANIC ANALYSES DATA SHEET

						E	PA SAMPLE NO.
							SW-2-SU-7
Lab Name:	Adirondack	Environmenta	<u>1</u> Co:	atract:	Black Ash Po	nd_	
Lab Code:	AES	Case No.:	ESE 0701	SAS No.:		SDG No.:	SW-1-SU-7
Matrix (soi)	l/water):	WATER		Lab	Sample ID:	070622041-	-002A
Level (low/r	ned): <u>LO</u>	W		Dat	e Received:	6/22/2007	

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight):

**UG/L** 

CAS No.	Analyte	Concentration C		Q	м
7429-90-5	Aluminum	71.1	В	Î	P
7440-36-0	Antimony	16.2	ס		P
7440-38-2	Arsenic	2.4	ام		P
7440-39-3	Barium	6.5	В	]	P
7440-41-7	Beryllium	0.30	م ا	{	P
7440-43-9	Cadmium	0.50	ש		P
7440-70-2	Calcium	17400	1	B	P
7440-47-3	Chromium	2.7	שן		P
7440-48-4	Cobalt	0.90	ם		Р
7440-50-8	Copper	6.5	B		P
7439-89-6	Iron	199	1		Р
7439-97-6	Mercury	0.06	ם	N	cv
7439-92-1	Lead	1.6	סן		P
7439-95-4	Magnesium	4270	B	E	P
7439-96-5	Manganese	15.7		E	P
7440-02-0	Nickel	0.90	D	1	P
7440-09-7	Potassium	698	В		Р
7782-49-2	Selenium	3.2	В		P
7440-22-4	Silver	1.8	ש		P
7440-23-5	Sodium	7300		E	Р
7440-28-0	Thallium	5.8	В		P
7440-62-2	Vanadium	4.2	ס		Р
7440-66-6	Zinc	1.6	В		P

Color Before:	 Clarity B	efore:	 Texture:	
Color After:	 Clarity A	fter:	 Artifacts:	
Comments:			 	
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## INORGANIC ANALYSES DATA SHEET

					ALA SILLET		E	PA SAMPLE NO	
								SW-3-SU-7	
Lab Name:	Adirondack	Environmenta	1 Co:	atract:	Black Ash	Pond			
Lab Code:	AES	Case No.:	ESE 0701	SAS No.:		SDG	No.:	SW-1-SU-7	_
Matrix (soil	L/water):	WATER		Lab	Sample ID:	0706	522041-	003A	
Level (low/r	ned): LON	7		Dat	e Received:	6/22	2/2007		

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight):

**V**G/L

CAS No.	Analyte	Concentration	Concentration C		м
7429-90-5	Aluminum	65.1	B		P
7440-36-0	Antimony	26.4	B	I	P
7440-38-2	Arsenic	7.4	В		P
7440-39-3	Barium	7.1	В		P
7440-41-7	Beryllium	0.30	ם		P
7440-43-9	Cadmium	0.50	ש		P
7440-70-2	Calcium	17900		E	P
7440-47-3	Chromium	2.7	שן		P
7440-48-4	Cobalt	0.90	ש		P
7440-50-8	Copper	5.6	В		P
7439-89-6	Iron	207			P
7439-97-6	Mercury	0.18	B	N	CV
7439-92-1	Lead	1.6	סן		P
7439-95-4	Magnesium	4500	B	E	P
7439-96-5	Manganese	18.6		E	Р
7440-02-0	Nickel	0.90	ש		P
7440-09-7	Potassium	685	В	Ī	P
7782-49-2	Selenium	4.9	В		P
7440-22-4	Silver	1.8	שן		P
7440-23-5	Sodium	6940	]	B	P
7440-28-0	Thallium	4.5	B		P
7440-62-2	Vanadium	4.2	ס		P
7440-66-6	Zinc	1.5	B		P

Color Before:	 Clarity Before:	 Texture:	
Color After:	 Clarity After:	 Artifacts:	
Comments:	 	 	
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# INORGANIC ANALYSES DATA SHEET

	EPA SAMPLE NO.
	SW-6-SU-7
Lab Name: Adirondack Environmental Contract: Black Ash Pond	
Lab Code: AES Case No.: ESE 0701 SAS No.: SDG N	No.: <u>SW-1-SU-7</u>
Matrix (soil/water): WATER Lab Sample ID: 07062	22041-004A
Level (low/med): LOW Date Received: 6/22,	/2007

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight):

UG/L

CAS No.	Analyte	Concentration		Q	м
7429-90-5	Aluminum	106	В	1	P
7440-36-0	Antimony	16.2	ש		P
7440-38-2	Arsenic	3.7	B		P
7440-39-3	Barium	6.9	B		P
7440-41-7	Beryllium	0.30	ש		P
7440-43-9	Cadmium	0.50	סן	]	P
7440-70-2	Calcium	17500		E	P
7440-47-3	Chromium	2.7	ם		P
7440-48-4	Cobalt	0.90	ש		P
7440-50-8	Copper	10.8	B		Р
7439-89-6	Iron	237	1	Ĩ	P
7439-97-6	Mercury	0.10	B	N	CV
7439-92-1	Lead	1.6	ם		Р
7439-95-4	Magnesium	4310	B	E	P
7439-96-5	Manganese	18.0	1	E	P
7440-02-0	Nickel	0.90	ש	1	P
7440-09-7	Potassium	643	В		P
7782-49-2	Selenium	2.4	ש		P
7440-22-4	Silver	1.9	В		P
7440-23-5	Sodium	7570		E	P
7440-28-0	Thallium	3.6	В		P
7440-62-2	Vanadium	4.2	ש		P
7440-66-6	Zinc	4.1	B		Р

Color Before:	 Clarity Before:	 Texture:		-	
Color After:	 Clarity After:	 Artifacts:			
Comments:	 	 			
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## INORGANIC ANALYSES DATA SHEET

	EPA SAMPLE NO.
	SW-9-SU-7
Lab Name: Adirondack Environmental Contract: Black Ash Pond	
Lab Code: AES Case No.: ESE 0701 SAS No.: SDG N	No.: <u>SW-1-SU-7</u>
Matrix (soil/water): WATER Lab Sample ID: 0706	22041-005A
Level (low/med): LOW Date Received: 6/22	/2007

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight):

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				-	
CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	73.9	B		P
7440-36-0	Antimony	16.2	שן		P
7440-38-2	Arsenic	3.0	]B		P
7440-39-3	Barium	7.0	B		P
7440-41-7	Beryllium	0.36	В		Р
7440-43-9	Cadmium	0.50	ם		Р
7440-70-2	Calcium	17700		E	Р
7440-47-3	Chromium	2.7	שן	1	P
7440-48-4	Cobalt	0.90	שן		₽
7440-50-8	Copper	8.6	В		P
7439-89-6	Iron	221			P
7439-97-6	Mercury	0.18	B	N	CV
7439-92-1	Lead	1.6	שן		P
7439-95-4	Magnesium	4460	B	E	₽
7439-96-5	Manganese	24.7		E	Р
7440-02-0	Nickel	0.90	ש	]	P
7440-09-7	Potassium	630	B		P
7782-49-2	Selenium	2.4	שן		P
7440-22-4	Silver	] 1.8	שן		P
7440-23-5	Sodium	8060	1	E	P
7440-28-0	Thallium	3.9	B		P
7440-62-2	Vanadium	4.2	ש		₽
7440-66-6	Zinc	1.2	B		Р

Color Before:	 Clarity Before:	 Texture:	
Color After:	 Clarity After:	 Artifacts:	
Comments:		 	·
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#### INORGANIC ANALYSES DATA SHEET

	EPA SAMPLE NO.
	SW-10-SU-7
Lab Name: Adirondack Environmental Contract: Black Ash Pond	· · · · · · · · · · · · · · · · · · ·
Lab Code: AES Case No.: ESE 0701 SAS No.: SDG	No.: <u>SW-1-SU-7</u>
Matrix (soil/water): WATER Lab Sample ID: 070	622041-006A
Level (low/med): LOW Date Received: 6/2	2/2007

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight):

UG/L

CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	108	В		P
7440-36-0	Antimony	16.2	ש		P
7440-38-2	Arsenic	2.4	סן	1	P
7440-39-3	Barium	7.5	В		P
7440-41-7	Beryllium	0.30	D		P
7440-43-9	Cadmium	0.50	סן		P
7440-70-2	Calcium	16900	1	E	Р
7440-47-3	Chromium	2.7	ש	1	P
7440-48-4	Cobalt	0.90	ש		P
7440-50-8	Copper	2.7	B		P
7439-89-6	Iron	251			P
7439-97-6	Mercury	0.10	B	N	CV
7439-92-1	Lead	1.6	ש		P
7439-95-4	Magnesium	4330	В	E	P
7439-96-5	Manganese	26.3		E	P
7440-02-0	Nickel	0.90	ש		Р
7440-09-7	Potassium	575	B		P
7782-49-2	Selenium	2.4	ש		P
7440-22-4	Silver	1.8	ש		P
7440-23-5	Sodium	9750		B	P
7440-28-0	Thallium	2.0	В		P
7440-62-2	Vanadium	4.2	סן		P
7440-66-6	Zinc	3.1	В		P

Color Before:	 Clarity Before:	 Texture:	
Color After:	 Clarity After:	 Artifacts:	
Comments:	 		
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#### INORGANIC ANALYSES DATA SHEET

							EPI	A SAMPLE NO.
							s	W-11-SU-7
Lab Name:	Adirondack H	Invironmenta	.1 Cor	tract:	Black Ash F	ond		" <del></del>
Lab Code:	AES	Case No.:	ESE 0701	SAS No.:		SDG	No.: <u>S</u>	W-1-SU-7
Matrix (soil	/water):	VATER		Lab	Sample ID:	0706	<b>22</b> 041-0	07A
Level (low/m	ed): LOW			Date	e Received:	6/22	2/2007	

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight):

UG/L

	-				
CAS No.	Analyte	Concentration	c	Q	м
7429-90-5	Aluminum	127	В	İ –	P
7440-36-0	Antimony	16.2	ען		P
7440-38-2	Arsenic	2.4	ם		P
7440-39-3	Barium	8.5	B		P
7440-41-7	Beryllium	0.30	ם	1	P
7440-43-9	Cadmium	0.50	סן		P
7440-70-2	Calcium	17200	l	E	P
7440-47-3	Chromium	2.7	ש		P
7440-48-4	Cobalt	0.90	ש		P
7440-50-8	Copper	11.9	В		P
7439-89-6	Iron	256	1		P
7439-97-6	Mercury	0.17	B	N	CV
7439-92-1	Lead	1.6	ש		₽
7439-95-4	Magnesium	4400	B	E	P
7439-96-5	Manganese	28.2		E	Р
7440-02-0	Nickel	0.90	ש		P
7440-09-7	Potassium	661	В		P
7782-49-2	Selenium	2.4	ש		P
7440-22-4	Silver	1.8	ש	_	P
7440-23-5	Sodium	9740	1	E	Р
7440-28-0	Thallium	1.6	B		Р
7440-62-2	Vanadium	4.2	ש		P
7440-66-6	Zinc	3.3	В		P

Color Before:	 Clarity Before:	 Texture:	
Color After:	 Clarity After:	 Artifacts:	
Comments:		 	
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CONVENTIONALS ANALYSIS DATA SHEET

LAB NAME:	Adirondack En	nvironmental		CONTRACT:		SW-1-	-SU-7	
LAB CODE:	AES	Case No.:	ESE 0701	SAS No.:	SD	G No.:	S₩-1-SU-7	
Matrix (so	il/water):	Water		Lab	Sample ID	: 07062	2041-001	
Level (Low	/Med):	Low		Date	e Received	: 6/	22/07	
% Solids:		0.0						

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	с	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 300.0
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				SM18 5310C
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols				EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Eh				
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 9012
РН	6.8			EPA 150.1
Turbidity	2.4			EPA 180.1
Color				EPA 110.2
Hexavalent Chromium				SW 7196

Comments

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CONVENTIONALS ANALYSIS DATA SHEET

	CONVENTIONAL	LS ANALYSIS DATA SHEET	
LAB NAME: Adironda	ack Environmental	CONTRACT:	SW-2-SU-7
LAB CODE: AES	Case No.:	ESE 0701 SAS No.:	SDG No.: SW-1-SU-7
Matrix (soil/water	): Water	Lab Sample	ID: 070622041-002
Level (Low/Med):	Low	Date Recei	ved: 6/22/07
<pre>% Solids:</pre>	0.0		

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	с	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate		1		EPA 300.0
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				SM18 5310C
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols				EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Eh				
Specific_Conductance				EPA 120.1
Cyanide	10	U		EPA 9012
pH	7.2			EPA 150.1
Turbidity	1.5			EPA 180.1
Color				EPA 110.2
Hexavalent Chromium				SW 7196

Comments

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CONVENTIONALS ANALYSIS DATA SHEET

LAB 1	NAME :	Adirondack	Environmental		CONTRACT:			SW-3-	-SU-7
LAB (	CODE:	AES	Case No.:	ESE 0701	SAS No.	:	SDG	No.:	SW-1-SU-7
Matri	ix (so	il/water):	Water		Lab	Sample	ID:	07062	2041-003
Leve]	L (Low	/Med):	Low		Dat	e Receiv	ved:	6/	22/07
€ So]	Lids:		0.0						

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	с	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 300.0
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				SM18 5310C
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols				EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Eh				
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 9012
рН	7.4			EPA 150.1
Turbidity	1.7			EPA 180.1
Color				EPA 110.2
Hexavalent Chromium				SW 7196

Comments

1 CONVENTIONALS ANALYSIS DATA SHEET

LAB NAME: Adirondack	C Environmental		CONTRACT:	SW-6-SU-7
LAB CODE: AES	Case No.:	ESE 0701	SAS No.:	SDG No.: SW-1-SU-7
Matrix (soil/water):	Water		Lab Sample	ID: 070622041-004
Level (Low/Med):	Low		Date Receiv	ved: 6/22/07
<pre>% Solids:</pre>	0.0			

Concentration Units (ug/L or mg/Kg dry weight): ug/L

			<u>.</u>		
Analyte	Concentration	с	Q	Method	
Total Kjeldahl Nitrogen, as N				EPA 351.3	
Ammonia, as N				EPA 350.1	
Nitrate				EPA 300.0	
Chemical Oxygen Demand (COD)				EPA 410.4	
Biochemical Oxygen Demand (BOD 5)				EPA 405.1	
Total Organic Carbon (TOC)		1		SM18 5310C	
Total Dissolved Solids (TDS)				EPA 160.1	
Sulfate				EPA 300.0	
Alkalinity				EPA 310.1	
Total Phenols				EPA 420.1	
Chloride				EPA 300.0	
Bromide	<b>I</b>			EPA 300.0	
Eh					
Specific Conductance				EPA 120.1	
Cyanide	10	U		EPA 9012	
PH	7.6			EPA 150.1	
Turbidity	5.8			EPA 180.1	
Color				EPA 110.2	
Hexavalent Chromium				SW 7196	

Comments
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CONVENTIONALS ANALYSIS DATA SHEET

LAB NAME: Ad:	irondack Env	vironmental		CONTRACT:		SW-9-	-SU-7
LAB CODE: AE	S	Case No.:	ESE 0701	SAS No.:	SDG	No.:	SW-1-SU-7
Matrix (soil/	water):	Water		Lab	Sample ID:	: 07062	2041-005
Level (Low/Me	:d):	Tom		Date	Received:	6/	22/07
% Solids:		0.0					

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	с	Q	Method
Total Kjeldahl Nitrogen, as N				FDN 251 2
Ammonia, as N			_	EPA 250 1
Nitrate	<u> </u>			EDD 200 0
Chemical Oxygen Demand (COD)				EPA 300.0
Biochemical Oxygen Demand (BOD 5)				EPA 410.4
Total Organic Carbon (TOC)	<u> </u>			EPA 405.1
Total Dissolved Solids (TDS)	<u> </u>			SM18 5310C
Sulfato				EPA 160.1
				EPA 300.0
				EPA 310.1
Total Phenols				EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Eh				
Specific Conductance				EPA 120 1
Cyanide	10			FDN 0012
pH	7.5			EDD 150 1
Turbidity	2.2			EPA 190.1
Color				EPA 180.1
Heyawalent Chromium				EPA 110.2
				SW 7196

Comments

FORM I - CONV

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1

CONVENTIONALS ANALYSIS DATA SHEET

LAB NAME:	Adirondack	Environmental		CONTRACT:		SW-10-SU-7	′
LAB CODE:	AES	Case No.:	ESE 0701	SAS No.:	SDG	No.: SW-1	-su-7
Matrix (so	il/water):	Water		Lab :	Sample ID:	070622041	-006
Level (Low	/Med):	Low		Date	Received:	6/22/0	7
% Solids:		0.0					

Concentration Units (ug/L or mg/Kg dry weight): ug/L

		_		
Analyte	Concentration	с	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 300.0
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				SM18 5310C
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols				EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Eh				
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 9012
pH	7.4			EPA 150.1
Turbidity	2.9			EPA 180.1
Color				EPA 110.2
Hexavalent Chromium				SW 7196

Comments

FORM I - CONV

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CONVENTIONALS ANALYSIS DATA SHEET

LAB NAME:	Adirondack E	nvironmental		CONTRACT:	SW-11-:	3U-7
LAB CODE:	AES	Case No.:	ESE 0701	SAS No.:	SDG No.: S	W-1-SU-7
Matrix (so:	il/water):	Water		Lab Sample	ID: 070622	041-007
Level (Low,	/Med):	Low		Date Receiv	ved: 6/2	2/07
% Solids:		0.0				

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	с	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 300.0
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				SM18 5310C
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols				EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Eh		-		
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 9012
pH	7.4			EPA 150.1
Turbidity	3.4			EPA 180.1
Color				EPA 110.2
Hexavalent Chromium				SW 7196

Comments

FORM I - CONV

# 6

# DUPLICATES

						_		NOP L	e no.	_	
							SW	-11-	SU-7DP		
Lab Name:	Adironda	ack Environmen	ntal	Contract:	<u>Bla</u>	ck Ash Pond	1				
Lab Code:	AES	Case No.:	<u>ESE 0701</u>	SAS N	SDG No.	ST	7-1-SU-7				
Matrix (soi)	L/water):	WATER	Level (low/med): LOW								
9 Colida for		0.0	- % Solids for Duplicate: 0.0								
4 SOLIUS 101	с защрте.	. 0.0					· · · · ·				
		Concentration	Units (ug,	L or mg/kg	i qrj	y weight):		L.			
Analyte		Control								Γ	
			Sample (S)	107 0004	С	Duplicate	e (D)	_ C	RPD	Q	M
Aluminum	<u> </u>			127.0334	в		131.5536	в	3.5		P
Antimony	<u>/</u>			16,2000	σ		16.2000	υ		<b> </b>	P
Arsenic		<u>_</u>		2.4000	σ		2.4000	U		L .	P
Barium				8.5331	в		0.5142	в	0.2		P
Berylliv	1111			0.3000	υ	<u> </u>	0.3000	υ			P
Cadmium				0.5000	υ		0.5000	υ			P
Calcium		5000.0	17	224.6538			L7209.7900		0.1		Р
Chromium	n .			2.7000	υ		2.7000	υ			P
Cobalt				0.9000	υ		0.9000	υ			P
Copper				11.9008	в		10.6302	в	11.3		P
Iron		100.0		256.1508			255.5509		0.2		P
Mercury				0.1700	в		0.1200	в	34.5		cv
Lead				1.6000	υ		1.6000	υ			P
Magnesiu	um		4	399.1669	в	<u> </u>	4380.7810	в	0.4		P
Manganes	e	15.0		28.2486			28.1704	-	0.3		P
Nickel				0.9000	υ		0.9000	υ		<u>-</u>	P
Potassiu	un j			661.3654	B		657.8484	в	0.5		P
Selenium				2.4000	U		2.4000	σ			Р
Silver	i-			1.8000	υ		1.8000	υ			P
Sodium		5000.0	9	740.7425			9879.9960		1.4		ΡÌ
Thallium				1.6425	в		2.6104	в	45.5		P
Vanadium				4.2000	υ		4.2000	υ			P
Zinc				3.3365	в		3.3067	в	0.9		P
							/	- 11			E

# 6

# DUPLICATES

LAB NAME: Adirondack En		Environmental	C	CONTRACT:	SW-11-SU-7			
LAB CODE:	AES	Case No.:	ESE 0701	SAS No.:	SDG No.	: SW-1-SU-7		
Matrix (s	oil/water):	Water		Level (Low/Med):		Low		
% Solids	for Sample:	0.0		% Solids for Dup.	licate:	0.0		

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Dealarte	Control							
Analyte	8 R	Sample (S)	с	Duplicate (D)	с	€R	0	м
TKN as N			T					
Ammonia, <u>as N</u>								
Nitrate								
COD								
BOD 5								
TOC								
TDS								
Sulfate								
Alkalinity								
Total Phenols								<u>.</u>
Chloride								
Bromide								<u> </u>
Eh								
Specific Conductance								
Cyanide	20	10	U	10	U	NC		
pH	20	7.36		7.39		0.4	-	
Turbidity	20	3.4		3.6		5.7		
Color			$\square$					
Hexavalent Chromium								

Comments

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FORM VI - CONV

### 5A

### SPIKE SAMPLE RECOVERY

						_	SAN	TPLE NO.			
							SW-1	1-SU-7MS			
Lab N	ame: <u>Adiron</u> c	lack Envir	conmental	Cor	ntract: Black As	h P	ond				
Lab C	ab Code: AES Case No.: ESE 0701 SAS No.: SDG No.:										
Matri	x (soil/water	): <u>WATER</u>	Le	evel	(low/med): LOW	T					
% Sol:	ids for Sampl	e: <u>0.0</u>			<u><u></u></u>						
		Con	centration Units (ug	/г	or mg/kg dry weigh	t):	_UG/L	-			
	Analyte	Control	Spiked Sample Result (SSR)	с	Sample Regult (SP)	c	Spike	67			
	Aluminum	75 - 125	2219 5250	_	107 0224		Added (SA)	TR	2	M	
	Antimony	75 - 125	E40.0710	<u> </u>	127.0334	в	2000.00	104.6		P	
	Arsenic	75 - 125	549.0710		16.2000	0	500.00	109.8		P	
	Barium	75 125	45.0405	<u> </u>	2.4000	0	40.00	112.6		Р	
	Berullium		2123.2930		8.5331	В	2000.00	105.7		P	
	Cadmium	75 - 125	56.2271		0.3000	ש	50.00	112.5		P	
		75 - 125	52.0083		0.5000	υ	50.00	104.0		P	
	Carcium		17964.8500		17224.6538		0.00	0.0		Р	
	Chromium	75 - 125	207.5372		2.7000	υ	200.00	103.B		Р	
	Cobalt	75 - 125	521.0366		0.9000	υ	500.00	104.2		P	
	Copper	75 - 125	261.9356		11.9008	в	250.00	100.0		P	
	Iron	75 - 125	1369.1310		256.1508		1000.00	111.3		P	
1	Mercury	75 - 125	1.6500		0.1700	в	2.00	74.0	N	cv	
	Lead	75 - 125	18.5130		1.6000	υ	20.00	92.6		P	
Į	Magnesium		4567.3650	в	4399.1669	в	0.00	0.0		P	
<u> </u>	Manganese	75 - 125	556.5197		28.2486		500.00	105.7		P	
[	Nickel	75 - 125	539.7547		0.9000	υ	500.00	108.0		P	
I	Potassium		679.7034	B	661.3654	B	0.00	0.0	-	Р	
Ī	Selenium	75 - 125	11.7786	Í	2.4000	ט	10.00	117.8		P	
Ĩ	Silver	75 - 125	46.1470	İ	1.8000	υI	50.00	92.31		P	
Ī	Sodium		9829.7810	i	9740.7425	i	0.00	0.0		P	
Ī	Thallium	75 - 125	44.0802	ī	1.6425	вІ	50.00	84.9		P	
Ī	Vanadium	75 - 125	528.6507	j	4.2000	υΙ	500.00	105.7		P	
Ì	Zinc	75 - 125	548.0071	ĺ	3.3365	вІ	500.00	108.9		P	
						_				-	

Comments:

**5B** 

### POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

SW-11-SU-7A

lab N	Name: <u>Adiro</u> 1	ndack Envi	ronmental	_	Contract: Black Ash Pond							
Lab (	Code: <u>AES</u>	Case	No.: <u>ESE 0701</u>	S7	AS No.:	ł	SDG No.: SW-	-1-SU-7				
<i>(</i> atri	ix (soil/water	): <u>wate</u>	CR		Level (low/	лес	l): LOW					
			Concen	trai	tion Units: ug/L							
	Analyte	Control Limit %R	Spiked Sample Result (SSR)	с	Sample Result (SR)	с	Spike Added (SA)	&R	Q	м		
	Aluminum		3729.03		127.03	в	4000.0	90.0		P		
	Antimony		924.50		16.20	σ	1000.0	92.4		P		
i	Arsenic		77.35		2.40	υ	80.0	96.7		P		
İ	Barium	1	3591.13		8.53	в	4000.0	89.6		P		
i	Beryllium		94.63		0.30	υ	100.0	94.6		P		
ĺ	Cadmium		93.18		0.50	υ	100.0	93.2	]	P		
ĺ	Calcium		17041.60		17224.65		0.0	0.0		P		
j	Chromium		358.92		2.70	υ	400.0	89.7		P		
	Cobalt		932.20		0.90	υ	1000.0	93.2		P		
İ	Copper		452.55		11.90	в	500.0	88.1		P		
j	Iron		2224.05		256.15		2000.0	98.4		P		
Ì	Lead		34.42		1.60	σ	40.0	86.0		P		
l	Magnesium		4308.68	в	4399.17	в	0.0	0.0		P		
j	Manganese		973.98		28.25		1000.0	94.6		P		
i	Nickel		968.06		0.90	υ	1000.0	96.B		P		
i	Potassium		652.64	в	661.37	в	0.0	0.0		P		
j	Selenium		24.78		2.40	Ũ	20.0	123.9		Р		
i	Silver		83.98		1.80	U	100.0	84.0		P		
i	Sodium		9899.61		9740.74		0.0	0.0		P		
i	Thallium		80.33		1.64	в	100.0	78.7		Р		
i	Vanadium		911.44		4.20	U	1000.0	91.1		P		
i	Zinc		975.11		3.34	в	1000.0	97.2		P		

Comments:

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SPIKE SAMPLE RECOVERY

LAB NAME: Adirondack Environmental CONTRACT:

**SW-11-SU-7** 

Level (Low/Med): Low

LAB CODE: AES Case No.: ESE 0701 SAS No.: SDG No.: SW-1-SU-7

Matrix (soil/water): Water

% Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

	Control	Spiked								_
Analyte	Limit	Sample		Sam	le		Spike	1	1	
	% R	Result (SSR)	С	Result	(SR)	с	Added (SA)	₩ R	Q	м
TKN as N			Т							
Ammonia, as N										
Nitrate			T							
COD										
BOD 5										
TOC										
TDS					_					
Sulfate			1							
Alkalinity								1		
Total Phenols										
Chloride								t		
Bromide										
Eh										
Specific Conductance										
Cyanide	75-125	92		10		υ	100	92		
pH										
Turbidity										
Color										
Hexavalent Chromium										

Comments

FORM V (Part 1) - CONV

# 3

### BLANKS

Lab Name: Adirondack Environmental Contract: Black Ash Pond

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Lab Code: <u>AES</u> Case No.: <u>ESE 0701</u> SAS No.: \_\_\_\_\_SDG No.: <u>SW-1-SU-7</u>

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

	Initial Calib. Blank	Continuing Calibration Blank (ug/L) Blank								
Analyte	(ug/L) C	1	С	2	с	3	с		С	м
Aluminum	15.1 B	17.9	в	9.2	B	8.3	в	9.182	в	P
Antimony	16.2 U	16.2	ש	16.2	ט	16.2	υ	16.200	U	P
Arsenic	2.4 U	2.4	שן	2.4	U	2.4	σ	2.400	U	P
Barium	3.4 U	3.4	ע	3.4	ש	3.4	υ	3.400	ΰ	P
Beryllium	0.3 U	0.3	ש	0.3	ש	0.3	υ	0.300	U	P
Cadmium	0.5 ប	0.5	ש	0.5	ש	0.5	U	0.500	U	P
Calcium	6.9 U	6.9	ש	6.9	υ	6.9	υ	6.900	υ	P
Chromium	2.7 U	2.7	U	2.7	ט	2.7	U	2.700	υ	P
Cobalt	0.9 U	0.9	ש	0.9	ש	0.9	υ	0.900	υ	P
Copper	2.0 U	2.0	ש	2.0	U	2.0	υ	2.000	U	P
Iron	7.3 U	12.5	B	7.3	ע	7.3	υ	7.300	υ	P
Mercury	0.06 ប	0.06	ש	0.06	σ	0.06	ΰ	0.210		CV
Lead	1.6 U	1.6	ע	1.6	υ	1.6	υ	1.600	υ	P
Magnesium	9.2 U	9.2	U	9.2	U	9.2	U	9.200	ΰ	P
Manganese	0.3 U	0.3	ש	0.3	U	0.3	υ	0.300	υ	P
Nickel	0.9 U	0.9	υ	0.9	υ	0.9	U	0.900	υ	P
Potassium	3.2 U	3.2	U	3.2	υ	3.2	υ	3.200	υ	P
Selenium	2.4 U	2.4	σ	2.4	U	2.4	υ	2.400	υ	P
Silver	1.8 U	1.8	U	1.8	U	1.8	υ	1.800	υ	P
Sodium	8.6 ប	8.6	σ	8.6	υ	B.6	υ	25.579	в	P
Thallium	1.6 U	1.6	U	1.6	υ	1.6	υ	7.362	в	P
Vanadium	4.2 U	4.2	σ	4.2	U	4.2	υ	4.200	U	P
Zinc	0.7 U	0.7	U	0.7	U	0.7	U	0.700	υ	P

### 3

### BLANKS

Lab Name: Adirondack Environmental Contract: Black Ash Pond

Lab Code: <u>AES</u> Case No.: <u>ESE 0701</u> SAS No.: <u>SDG No.: SW-1-SU-7</u> Preparation Blank Matrix (soil/water): <u>WATER</u>

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

ь

	Initial Calib. Blank			С	ontinuing Cal Blank (ug/	Lib: /L)	ration		Preparation Blank		
Analyte	(ug/L)	с	1	С	2	с	3	с		с	м
Aluminum	]		29.8	B	7.8	B	9.7	В	<u> </u>		P
Antimony			16.2	ע	16.2	U	16.2	υ			P
Arsenic			2.4	υ	2.4	U	2.4	υ			P
Barium			3.4	υ	3.4	ט	3.4	U			P
Beryllium			0.3	ע	0.3	U	0.3	ע			P
Cadmium			0.5	U	0.5	υ	0.5	U			P
Calcium	Į		6.9	ט	6.9	U	6.9	υ			P
Chromium			2.7	ע	2.7	U	2.7	U			P
Cobalt			0.9	שן	0.9	ס	0.9	υ			P
Copper	Ī		2.0	ען	2.0	ט	2.0	σ			P
Iron	]		7.3	U	7.3	U	7.3	U			P
Mercury			0.06	σ	0.06	Ũ					CV
Lead			1.6	ש	1.6	υ	1.6	υ			P
Magnesium			9.2	U	9.2	υ	9.2	υ			P
Manganese			0.3	שן	0.3	υ	0.3	U			P
Nickel	)		0.9	U	0.9	U	0.9	υ			P
Potassium			3.2	ש	3.2	ט	3.2	U			P
Selenium			2.4	U	2.4	U	2.4	U			P
Silver	-		1.8	ן ט ן	1.8	ש	1.8	U			P
Sodium			8.9	B	25.7	B	24.2	В			P
Thallium			1.6	υ	1.6	U	1.6	υ			P
Vanadium			4.2	ש	4.2	ס	4.2	υ			P
Zinc			0.7	υ	0.7	ש	0.7	υ			P

# 3

### BLANKS

 Lab Name:
 Adirondack Environmental
 Contract:
 Black Ash Pond

 Lab Code:
 AES
 Case No.:
 ESE 0701
 SAS No.:
 SDG No.:
 SW-1-SU-7

Preparation Blank Matrix (soil/water): <u>WATER</u>\_\_\_\_\_

-

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

	Initial Calib. Blank			Co	ntinuing ( Blank (1	Calibr ug/L)	ation		Preparation Blank		
Analyte	(ug/r)	С	1	С	2	с	3	с		С	м
Aluminum			13.7	в			-	1			P
Antimony			16.2	ש							P
Arsenic			2.4	U				1			P
Barium			3.4	υ						· · · · · ·	P
Beryllium			0.3	ש							P
Cadmium			0.5	ש							P
Calcium			6.9	ש		i i		1			P
Chromium			2.7	ש							P
Cobalt			0.9	U		11					P
Copper			2.0	טן		11					P
Iron			7.3	ש				1			P
Lead			1.6	ע			•				P
Magnesium			9.2	ע							P
Manganese			0.3	ש					1		P
Nickel			0.9	ען		ÎÌ					P
Potassium			3.2	ש		11					P
Selenium			2.4	ע			· · ·				P
Silver			1.8	<u></u> <u></u>		ÍÍ		TÎ			P
Sodium			8.6	ש							P
Thallium			1.6	ש							P
Vanadium			4.2	ע		11					P
Zinc			0.7	U			<u>.</u>	$\top$			P

3

BLANKS

LAB NAME:	Adirondack	Environmental	CONTRACT:		
LAB CODE:	AES	Case No.: ESE 0701	SAS No.: SD	DG No.:	S₩-1-SU-7
Preparatio	on Blank Mat	Trix: Water			

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib.		Continuing Calibration							p. nk	Method
	Blank(ug/L)	С	1	С	2	С	3	С	_	С	
TKN as N								_			EPA 351.3
Ammonia, as N											EPA 350.1
Nitrate											EPA 300.0
COD											EPA 410.4
BOD 5										_	EPA 405.1
TOC							_	_			SM18 5310C
TDS								_			EPA 160.1
Sulfate											EPA 300.0
Alkalinity											EPA 310.1
Total Phenols								· ·			EPA 420.1
Chloride		<u> </u>									EPA 300.0
Bromide								_			EPA 300.0
Eh											
Specific Conductance											EPA 120.1
Cyanide	10	U	10	U	10	U	10	U	10	U	EPA 9012
pH											EPA 150.1
Turbidity											EPA 180.1
Color											EPA 110.2
Hexavalent Chromium											SW 7196

Comments

FORM III - CONV

#### 3 17 NN22

BLANKS

LAB NAME: A	dirondack Environme	ntal			CONTRACT	:			
LAB CODE:	AES	Case No.:	ESE 0701	SAS	No.:	SDG	No.:	SW-1-SU-7	
Preparation	Blank Matrix:		Water						
Preparation	Blank Concentratio	n Units:	ug/L						

	Initial		Cor	itin	uing C	alir	ratio	n	Prep.	Method		
Analyte	Calib.		1						Blank	Method		
	Blank(ug/L)	С	1	С	2	С	3	С	С			
TKN as N										EPA 351.3		
Ammonia, as N										EPA 350.1		
Nitrate										EPA 300.0		
COD										EPA 410.4		
BOD 5										EPA 405.1		
TOC										SM18 5310C		
TDS										EPA 160.1		
Sulfate										EPA 300.0		
Alkalinity										EPA 310.1		
Total Phenols										EPA 420.1		
Chloride										EPA 300.0		
Bromide										EPA 300.0		
Eh												
Specific Conductance										EPA 120.1		
Cyanide			10	U	10	U	10	U		EPA 9012		
pH										EPA 150.1		
Turbidity										EPA 180.1		
Color										EPA 110.2		
Hexavalent Chromium										SW 7196		

Comments

FORM III - CONV

CONTRA

SAMPLE DATA

PACKAGE



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## **Case Narrative**

# Client: Earth Science Engineering - Black Ash Pond / Willsboro

Case: ESE 0701

SDG: SW-1-SU-7

<u>Sample ID</u>	Laboratory Sample ID	Date Received	<u>VTSR</u>	<u>Matrix</u>
SW-1-SU-7	070622041-001	06/22/07	12:14	Water
SW-2-SU-7	070622041-002	06/22/07	12:14	Water
SW-3-SU-7	070622041-003	06/22/07	12:14	Water
SW-6-SU-7	070622041-004	06/22/07	12:14	Water
SW-9-SU-7	070622041-005	06/22/07	12:14	Water
SW-10-SU-7	070622041-006	06/22/07	12:14	Water
SW-11-SU-7	070622041-007	06/22/07	12:14	Water

# Inorganics – Metals

- 1) The water samples received on 6/22/07 had a temperature of 11 °C.
- 2) The recovery for Aluminum, Calcium and Iron in the ICSA and the ICSAB check standards were outside the required limit. The required concentration for these analytes in the check standards is 500,000 ug/L and 200,000 ug/L, respectively. The linear range on this instrument for Aluminum, Calcium and Iron is 250,000 ug/L, 200,000 ug/L and 80,000 ug/L, respectively. At this level accurate recovery of Aluminum, Calcium and Iron in the check standards is not possible. No further action is required.
- 3) The digested spike recovery for the element Mercury on sample SW-11-SDU-7 (AES sample number 070622041-007) was outside the required 75-125 % limits. The results for this element are flagged with an "N" as specified by the protocol. This indicates possible matrix interference.
- 4) The elements Calcium, Magnesium, Manganese and Sodium for sample SW-11-SDU-7 (AES sample number 070622041-007) did not meet the serial dilution criteria of 10 %. These elements are flagged with an "E" as required by the protocol. The "E" denotes an estimated value. This indicates a possible chemical or physical interference.

# Conventionals

- 1) The water samples were analyzed for only for pH, Turbidity and Cyanide.
- 2) Sample SW-11-SDU-7 (AES sample number 070622041-007) was used for the water matrix spike and the duplicate analysis. All recoveries were within acceptable limits.



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"I certify that this data package is in compliance with the terms and conditions of the protocol, both technically and for completeness, to the best of my knowledge, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature."

Laboratory Manager

Date: \_\_\_\_\_9/4/07



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Fynerience	le	the	colution
experience	15	ΠΘ	Solution

A full service analytical research laboratory offering solutions to environmental

Client Name:	hhA	ress:							
Earth S	cience Engineering P. 8 3	271 Main	n Street	, P.	0.B	07	398		Willsbord, NY 12496
Da ucilár	R. Ferris P.E. B	iect Name (Location	in (wil	Ichn	n)	amplers	: (Nami	es) R	11
Client Phone M	lo: Client Fax No:	POI	Number:		S	amplers	: (Sign:	ature	1-Dahozy
(518) 96	3-8133 (518)963-1	440 r	-01- 00		e / 84		-	K	C
AES Sample Number	Cilent Sample Identification & Loc	ation	Date Sampled	A=a.( P=p.(	m. Kab		e Co	of nl's	Analysis Required
001	SW - 1 - SU - 07		6/21	2:10	êω		13	3	TAL Metals, tot, Cyanida Turbidity, PH_W
600	50-2-50-07		1	2:05	θŵ		1		13
003	<u>sw-3- Su-07</u>		Δi.	8:00	PW		-11		v
604	SW-6-SU-07	F	12	2:00	A W		1		ν
005	SW - 9 - SU - 0	7		8:30	PW		11		N1
006	500-10-50-0	7	**	9:00	PW	1	-		11
007	SW - 11 - SU - 0	7 \	11	A:30	PW		1		,,,
008	MS1-560-11-50	-07 ·	17	9:20					17
20107	MSD1-5W-11-50	-071	11	9:30	9 P W	1	1		
	Mus-6-50-07				A	╶┾╼┥┙	4		
					A		<	1	
					A	-   ·  -			
					A	+	+		
					r A	╈┟	+ -		
AES Work Orde		CC Report	To / Special Ins	tructions	P   /Remarks	<u></u>			
0	70622041								•
Turnaround Tim	e Request:			•					
🗆 1 Day 🗔 2 Day	🗋 3 Day 🛛 Si Normal 🗔 5 Day	inos							
Relinquished by	: (Slgpatuper) ///	Hereived b	y: (Şignature)	0				1	Date/Time
Reference by	(Signatula)	17 Bacovard h	elon	Ú	w				6/21/07 11:45
ANDI	m Pm -		UPS						Wallor 2'00m
Relinquished by	: (Signature)	Received fo	r Laboratory by	In	2,1	11		1	
	TEMPERATURE	PROPE	RLY PRESERVED	<u>u</u>	14		RECE	U <u>/</u> IVED	WITHIN HOLDING TIMES
An	nbient or Chilled	The second second second second second second second second second second second second second second second se	) N					$\mathcal{C}$	Î N
Notes:	WHITE - Lab Conv	YELLOW -	Sampler Conv		-	Note	S:	Ger	
	Adiror	ndack Envir	onmental	Serv	ires	Inc		901	erator oopy
			Canadiaterinter	Conv	1000,	nio.			:00033

(518) 434-4546

WorkOrder: 070622041

**CHAIN-OF-CUSTODY RECORD** 

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Page 1

Cllant:

3		
Earth Science Engineering, P.C.	TEL:	(518) 963-8133
24 South Main Street	FAX:	(518) 963-7490
Willsboro, NY 12996	ProjectNo:	Willsboro / Black
	ΡΟ.	

22-Jun-07

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	TURBIDITY	0	υ	o	o	o	υ	U
uested Tests	PH_W	υ	υ	υ	υ	υ	υ	0
Req	IERCURY_WV	A	<	×	۲	۲	×	×
	CP METALS W	A	4	A	A	۲	<	4
	CYANIDE	B	æ	в	ß	æ	ß	ß
ő	Bottle							
	Collection Date	6/21/2007 9:30:00 AM	6/21/2007 9:00:00 AM	6/21/2007 8:30:00 AM	6/21/2007 2:00:00 PM	6/21/2007 8:00:00 AM	6/21/2007 2:05:00 PM	6/21/2007 2:10:00 PM
	Matrix	Water	Water	Water	Water	Water	Water	Water
	CllentSampID	SW-11-SU-07	SW-10-SU-07	20-U-9-SU-07	SW-6-SU-07	SW-3-SU-07	SW-2-SU-07	SW-1-SU-07
	Sample ID	070622041-007	070622041-006	070622041-005	070622041-004	070622041-003	070622041-002	070622041-001

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Comments:

anh/20.22.9 12. don 1/2/07 1700 NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. Date/Time mitale / Hy w/20/07 Zagen CN ,Turb. Received by: Parture G Therefor uptu / 10:00 - Received by: C Received by: 1/2/0) 10:00 6.22.07 1240 Date/Time Relinquished by: Relinquished by: Relinquished by:

Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

# INORGANIC - METALS

ANALYSIS

### **COVER PAGE - INORGANIC ANALYSES DATA PACKAGE**

Lab Name:	Adirondack Environmental	Contract: Black Ash Pond		
lab Code:	AES Case No.: ESE 0701	SAS No.: SDG No.: <u>SW-1-SU-7</u>		
SOW No.:	N/A			
	EPA Sample No.	Lab Sample ID.		
	SW-1-SU-7	070622041-001A		
	SW-2-SU-7	070622041-002A		
	SW-3-SU-7	070622041-003A		
	SW-6-SU-7	070622041-004A		
	SW-9-SU-7	070622041-005A		
	SW-10-SU-7	070622041-006A		
	SW-11-SU-7	070622041-007A		

Were ICP interelement corrections applied?	Yes/No	YES
Were ICP background corrections applied? If yes-were raw data generated before	Yes/No	YES
application of background corrections?	Yes/No	NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature:

9/4/07 Name:

Sheryl Martucci

Date:

Title:

Inorganics Manager

COVER PAGE - IN

# INORGANIC ANALYSES DATA SHEET

	EPA SAMPLE NO.
	SW-1-SU-7
Lab Name: Adirondack Environmental Contract: Black Ash Pond	
Lab Code: AES Case No.: ESE 0701 SAS No.: SI	DG No.: <u>SW-1-SU-7</u>
Matrix (soil/water): WATER Lab Sample ID: 0	70622041-001A
Level (low/med): LOW Date Received: 6	/22/2007

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight):

UG/L

		1				
	CAS No.	Analyte	Concentration	c	Q	M
	7429-90-5	Aluminum	79.3	В		P
	7440-36-0	Antimony	54.2	B	1	P
	7440-38-2	Arsenic	7.3	B		P
	7440-39-3	Barium	6.9	B		P
	7440-41-7	Beryllium	0.30	ד	[	P
	7440-43-9	Cadmium	0.50	σ	l	P
	7440-70-2	Calcium	17600		E	P
	7440-47-3	Chromium	2.7	ש		P
	7440-48-4	Cobalt	0.90	۵	1	Р
	7440-50-8	Copper	3.0	В		P
1	7439-89-6	Iron	234	1		P
ļ	7439-97-6	Mercury	0.21		N	CV
	7439-92-1	Lead	1.6	σ		P
	7439-95-4	Magnesium	4280	В	E	P
	7439-96-5	Manganese	18.7		E	P
ĺ	7440-02-0	Nickel	0.90	υ		P
ĺ	7440-09-7	Potassium	789	В		P
1	7782-49-2	Selenium	8.4			P
Ì	7440-22-4	Silver	1.8	ד		P
ĺ	7440-23-5	Sodium	6870		E	P
Í	7440-28-0	Thallium	6.9	в		P
Ī	7440-62-2	Vanadium	4.2	σ		P
Ī	7440-66-6	Zinc	3.7	В		P

Color Before:	<u> </u>	Clarity Before:	 Texture:	
Color After:		Clarity After:	 Artifacts:	
Comments:			 	
-			 	
-				

# INORGANIC ANALYSES DATA SHEET

							SW-2-SU-7
Lab Name:	Adirondack	Environmenta	al Co	ntract:	Black Ash Po:	nd	
Lab Code:	AES	Case No.:	<u>ESE 0701</u>	SAS No.:		SDG No.:	<u>SW-1-SU-7</u>
Matrix (soi)	l/water):	WATER		Lab	Sample ID:	070622041-	002A
Level (low/r	ned): LOV	1		Dat	e Received:	6/22/2007	

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight):

UG/L

EPA SAMPLE NO.

CAS No.	Analyte	Concentration	с	Q	м
7429-90-5	Aluminum	71.1	В	1	P
7440-36-0	Antimony	16.2	ש		P
7440-38-2	Arsenic	2.4	ש		P
7440-39-3	Barium	6.5	B	!	P
7440-41-7	Beryllium	0.30	שן	I	P
7440-43-9	Cadmium	0.50	יםן		P
7440-70-2	Calcium	17400		E	P
7440-47-3	Chromium	2.7	ש		P
7440-48-4	Cobalt	0.90	ס		P
7440-50-8	Copper	6.5	B		P
7439-89-6	Iron	199	l		P
7439-97-6	Mercury	0.06	ש	N	cv
7439-92-1	Lead	1.6	ש		Р
7439-95-4	Magnesium	4270	B	E	P
7439-96-5	Manganese	15.7		E	P
7440-02-0	Nickel	0.90	υ		Р
7440-09-7	Potassium	698	В		P
7782-49-2	Selenium	3.2	В		Р
7440-22-4	Silver	1.8	υ		P
7440-23-5	Sodium	7300		E	P
7440-28-0	Thallium	5.8	в		P
7440-62-2	Vanadium	4.2	σ		Р
7440-66-6	Zinc	1.6	B		P

Color Before:		Clarity Before:	 Texture:	
Color After:	<u> </u>	Clarity After:	 Artifacts:	
Comments:			 	

# INORGANIC ANALYSES DATA SHEET

Lab Name:	Adirondack	Environmenta	1 Co	entract:	Black Ash Po	ond	SW-3-SU-7
Lab Code:	AES	Case No.:	<u>ESE 0701</u>	SAS No.:		SDG No.:	SW-1-SU-7
Matrix (soil	l/water):	WATER		Lab	Sample ID:	070622041	-003A
Level (low/I	ned): LOW	7		Date	e Received:	6/22/2007	

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight):

UG/L

EPA SAMPLE NO.

CAS No.	Analyte	Concentration	С	Q	м
7429-90-5	Aluminum	65.1	B	Î	P
7440-36-0	Antimony	26.4	B	!	P
7440-38-2	Arsenic	7.4	B	1	P
7440-39-3	Barium	7.1	В		P
7440-41-7	Beryllium	0.30	שן		P
7440-43-9	Cadmium	0.50	ש		Р
7440-70-2	Calcium	17900		E	P
7440-47-3	Chromium	2.7	סן		P
7440-48-4	Cobalt	0.90	שן		P
7440-50-8	Copper	5.6	B		Р
7439-89-6	Iron	207			P
7439-97-6	Mercury	0.18	B	N	CV
7439-92-1	Lead	1.6	ש	1	Р
7439-95-4	Magnesium	4500	В	E	P
7439-96-5	Manganese	18.6		E	Р
7440-02-0	Nickel	0.90	ס	<u> </u>	P
7440-09-7	Potassium	685	В		P
7782-49-2	Selenium	4.9	B		Р
7440-22-4	Silver	1.8	σ		P
7440-23-5	Sodium	6940		E	P
7440-28-0	Thallium	4.5	В		P
7440-62-2	Vanadium	4.2	σ		P
7440-66-6	Zinc	1.5	B		P

Color Before:	Clarity Before:	Texture:	
Color After:	Clarity After:	Artifacts:	
Comments:			

# INORGANIC ANALYSES DATA SHEET

				EPA SAMPLE NO.
				SW-6-SU-7
Lab Name: Adir	ondack Environmental	Contract:	Black Ash Pond	
Lab Code: AES	Case No.: ESI	0701 SAS No.:	SD(	G No.: <u>SW-1-SU-7</u>
Matrix (soil/wate	er): WATER	Lab	Sample ID: 07	0622041-004A
Level (low/med):	LOW	Dat	e Received: <u>6/</u>	22/2007

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight):

UG/L

CAS No.	Analyte	te Concentration		Q	м
7429-90-5	Aluminum	106	В	Î	P
7440-36-0	Antimony	16.2	<u>م</u>		₽
7440-38-2	Arsenic	3.7	В	1	P
7440-39-3	Barium	6.9	B		P
7440-41-7	Beryllium	0.30	ם	[	P
7440-43-9	Cadmium	0.50	שן		P
7440-70-2	Calcium	17500	1	E	P
7440-47-3	Chromium	2.7	ש		] P
7440-48-4	Cobalt	0.90	ש		P
7440-50-8	Copper	10.8	B		P
7439-89-6	Iron	237			P
7439-97-6	Mercury	0.10	В	N	CV
7439-92-1	Lead	1.6	ס		P
7439-95-4	Magnesium	4310	В	E	P
7439-96-5	Manganese	18.0	1	E	P
7440-02-0	Nickel	0.90	ש		P
7440-09-7	Potassium	643	В		P
7782-49-2	Selenium	2.4	ש		Р
7440-22-4	Silver	1.9	B	1	P
7440-23-5	Sodium	7570		E	P
7440-28-0	Thallium	3.6	B		P
7440-62-2	Vanadium	4.2	ש		P
7440-66-6	Zinc	4.1	B		P

Color Before:	 Clarity Before:		Texture:	
Color After:	 Clarity After:	· <u></u>	Artifacts:	
Comments:				
_				
	 ······································			

### INORGANIC ANALYSES DATA SHEET

Lab Name:	Adirondack	Environment	al	Contract:	Black Ash	Pond	SW-9-SU-7
Lab Code:	AES	Case No.:	ESE 0701	SAS No.:		SDG No.:	<u>SW-1-SU-7</u>
Matrix (soil	/water):	WATER		Lab	Sample ID:	070622041	<u>-005A</u>
Level (low/m	ned): LOI	N		Dat	e Received:	6/22/2007	, <u> </u>

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight):

UG/L

EPA SAMPLE NO.

CAS No.	Analyte	Concentration		Q	м
7429-90-5	Aluminum	73.9	B		P
7440-36-0	Antimony	16.2	ש		P
7440-38-2	Arsenic	3.0	В		P
7440-39-3	Barium	7.0	В		Р
7440-41-7	Beryllium	0.36	В		P
7440-43-9	Cadmium	0.50	ס		P
7440-70-2	Calcium	17700		E	P
7440-47-3	Chromium	2.7	ם	1	P
7440-48-4	Cobalt	0.90	ס	l	P
7440-50-8	Copper	8.6	В	1	P
7439-89-6	Iron	221			P
7439-97-6	Mercury	0.18	В	N	CV
7439-92-1	Lead	1.6	סן		Р
7439-95-4	Magnesium	4460	В	E	P
7439-96-5	Manganese	24.7	1	E	₽
7440-02-0	Nickel	0.90	ש	I	P
7440-09-7	Potassium	630	B		P
7782-49-2	Selenium	2.4	ש	[	P
7440-22-4	Silver	1.8	ש		Р
7440-23-5	Sodium	8060		E	Р
7440-28-0	Thallium	3.9	В		P
7440-62-2	Vanadium	4.2	σ		Р
7440-66-6	Zinc	1.2	В		P

Color Before:	 Clarity Before:	 Texture:	
Color After:	 Clarity After:	 Artifacts:	
Comments:	 	 	
-	 <u> </u>	 ·	
-			

### INORGANIC ANALYSES DATA SHEET

			ORGANIC AN		ATA SHEET		EPA SAMPLE NO.
							SW-10-SU-7
Lab Name:	Adirondack	Environmenta	al Cor	tract:	Black Ash P	ond	
Lab Code:	AES	Case No.:	ESE 0701	SAS No.:		SDG No.:	<u>SW-1-SU-7</u>
Matrix (soi	l/water):	WATER		Lab	Sample ID:	070622041	-006A
Level (low/	med): LC	W		Dat	e Received:	6/22/2007	· · · · · · · · · · · · · · · · · · ·

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight):

UG/L

pineter and a second seco					
CAS No.	Analyte	Concentration		Q	м
7429-90-5	Aluminum	108	В		P
7440-36-0	Antimony	16.2	ש		P
7440-38-2	Arsenic	2.4	שן	]	P
7440-39-3	Barium	7.5	В		P
7440-41-7	Beryllium	0.30	סן		P
7440-43-9	Cadmium	0.50	שן		P
7440-70-2	Calcium	16900		E	P
7440-47-3	Chromium	2.7	ש		Р
7440-48-4	Cobalt	0.90	ם		P
7440-50-8	Copper	2.7	В		₽
7439-89-6	ITOD	251			P
7439-97-6	Mercury	0.10	В	N	CV
7439-92-1	Lead	1.6	ש		P
7439-95-4	Magnesium	4330	B	E	P
7439-96-5	Manganese	26.3		E	P
7440-02-0	Nickel	0.90	ש	l	P
7440-09-7	Potassium	575	B	l	P
7782-49-2	Selenium	2.4	<b>v</b>		P
7440-22-4	Silver	1.8	ש	1	P
7440-23-5	Sodium	9750	[	E	P
7440-28-0	Thallium	2.0	<b>B</b>		P
7440-62-2	Vanadium	4.2	ש	1	P
7440-66-6	Zinc	3.1	B		P

Color Before:		Clarity Before:	 Texture:	
Color After:		Clarity After:	 Artifacts:	
Comments:			 	·
	· · · · · · · · · · · · · · · · · · ·		 	
-				

# INORGANIC ANALYSES DATA SHEET

			ORGANIC AI	ALISES D	AIA SHEEI		F	PA SAMPLE NO.	
								SW-11-SU-7	_
Lab Name:	Adirondack	Environmenta	<u>1</u> Cc	ntract:	Black Ash	Pond	<u>L.</u>	<u>_</u>	
Lab Code:	AES	Case No.:	<u>ESE 0701</u>	SAS No.:		SDG	No.:	SW-1-SU-7	_
Matrix (soi	l/water):	WATER		Lab	Sample ID:	070	622041	-007A	
Level (low/	med): LO	4		Dat	e Received:	6/2	2/2007		

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight):

UG/L

	CAS No.	Analyte	Concentration		Q	м
	7429-90-5	Aluminum	127	В	İ	P
]	7440-36-0	Antimony	16.2	ש		[ P
	7440-38-2	Arsenic	2.4	ם		P
	7440-39-3	Barium	8.5	В	J	P
j	7440-41-7	Beryllium	0.30	ס	1	P
İ	7440-43-9	Cadmium	0.50	ם		P
ĺ	7440-70-2	Calcium	17200		Ē	P
1	7440-47-3	Chromium	2.7	סן	1	P
j	7440-48-4	Cobalt	0.90	סן	1	P
	7440-50-8	Copper	11.9	В		P
1	7439-89-6	Iron	256		1	P
	7439-97-6	Mercury	0.17	В	N	CV
ĺ	7439-92-1	Lead	1.6	ש		P
	7439-95-4	Magnesium	4400	В	E	P
ĺ	7439-96-5	Manganese	28.2	I	E	P
ĺ	7440-02-0	Nickel	0.90	ס		P
j	7440-09-7	Potassium	661	в		Р
j	7782-49-2	Selenium	2.4	ס		P
j	7440-22-4	Silver	1.8	ש	ĺ	P
Ì	7440-23-5	Sodium	9740		E	Р
Ì	7440-28-0	Thallium	1.6	B		P
ĺ	7440-62-2	Vanadium	4.2	ס		P
Í	7440-66-6	Zinc	3.3	в	1	P

Color Before:	 Clarity Before:	 Texture:		
Color After:	 Clarity After:	 Artifacts:	<u> </u>	
Comments:	 	 		
-				

#### 2A

### INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name:	Adirondack	Environmen	tal	_Contract: E	Black Ash	Pond		
Lab Code:	AES	Case No.:	ESE 0701	SAS No.:		SDG No.:	SW-1-SU-7	
Initial Ca	Initial Calibration Source: EPA-ICV							
Continuing	Calibration	Source: E	PA-LV					

Concentration Units: ug/L

	Initial	Calibration			Continuing	Calibra	ation		
Analyte	True	Found %	R(1)	True	Found	%R(1)	Found	%R(1)	м
Aluminum	2000.0	2186.22 1	09.3	2000.0	<b>2093</b> .21	104.7	2170.12	108.5	P
Antimony	2000.0	2018.90 1	.00,9	2000.0	1970.37	98.5	1979.05	99.0	Р
Arsenic	2000.0	2017.61 1	.00.9	2000.0	2035.07	101.8	2024.28	101.2	Р
Barium	2000.0	2069.85 1	03.5	2000.0	<b>2093</b> .96	104.7	2062.85	103.1	P
Beryllium	2000.0	2044.49 1	.02.2	2000.0	2070.84	103.5	2055.09	102.B	Р
Cadmium	2000.0	<b>2118</b> .80 <b>1</b>	.05.9	2000.0	2115.57	105.8	2118.51	105.9	P
Calcium	2000.0	2026.54 1	01.3	2000.0	2009.75	100.5	2047.88	102.4	Р
Chromium	2000.0	2006.97 1	.00.3	2000.0	1971.49	98.6	1991.35	99.6	Р
Cobalt	2000.0	2053.83 1	.02.7	2000.0	<b>2055.</b> 35	102.8	2067.91	103.4	Р
Copper	2000.0	2015.96 1	00.8	2000.0	2004.67	100.2	2008.34	100.4	P
Iron	2000.0	2095.66 1	.04.8	2000.0	<b>2142</b> .87	107.1	2106.77	105.3	P
Mercury	2.0	2.01 1	.00.5	2.0	2.00	100.0	1.99	99.5	[CV]
Lead	2000.0	2162.01 1	08.1	2000.0	2150.20	107.5	2187.27	109.4	P
Magnesium	2000.0	2042.14 1	.02.1	2000.0	2036.92	101.8	2033.55	101.7	Р
Manganese	2000.0	2007.16 1	.00.4	2000.0	1998.77	99.9	2014.77	100.7	P
Nickel	2000.0	<b>2105.</b> 51 <b>1</b>	05.3	2000.0	<b>2114</b> .61	105.7	2121.49	106.1	Р
Potassium	10000.0	9756.45	97.6	10000.0	<b>9864</b> .64	98.6	9775.86	97.B	P
Selenium	2000.0	2023.98 1	01.2	2000.0	2040.25	102.0	2026.47	101.3	Р
Silver	500.0	488.46	97.7	500.0	<b>491</b> .87	98.4	489.95	98.0	P
Sodium	2000.0	<b>1826.7</b> 5	91.3	2000.0	<b>2196</b> .54	109.8	1845.56	92.3	P
Thallium	2000.0	2150.14 1	.07.5	2000.0	2147.20	107.4	2166.68	108.3	P
Vanadium	2000.0	2022.05 1	01.1	2000.0	2116.17	105.8	2020.52	101.0	P
Zinc	2000.0	2062.19 1	03.1	2000.0	2081.74	104.1	2062.24	103.1	P

### 2A

### INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name:	Adirondack E	nvironm	iental		Contract:	Black	Ash Pond		
Lab Code:	AES	Case No	IO.: ESE	0701	SAS No.	:		SDG No.:	<u>SW-1-SU-7</u>
Initial Cal	libration Sourc	e: El	PA-ICV						
Continuing	Calibration So	urce:	EPA-LV						

Concentration Units: ug/L

	Initia	l Calibratio	a	Continuing Calibration							
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found %R(1)	м			
Aluminum				2000.0	2174.92	108.7	2156.37 107	8 P			
Antimony				2000.0	<b>1968.3</b> 6	98.4	1972.64 98	6 P			
Arsenic				2000.0	<b>2082.</b> 57	104.1	2021.08 101	1 P			
Barium				2000.0	2003.28	100.2	2073.70 103	7 P			
Beryllium				2000.0	<b>2092</b> .55	104.6	2059.58 103	0 P			
Cadmium				2000.0	2130.92	106.5	2113.00 105.	6 P			
Calcium		· · · · ·		2000.0	<b>2115</b> .56	105.8	2024.59 101	2 P			
Chromium				2000.0	1988.73	99.4	1991.75 99	6 P			
Cobalt				2000.0	2134.41	106.7	2057.87 102	9 P			
Copper				2000.0	<b>1969.</b> 53	98.5	2020.47 101.	0 P			
Iron				2000.0	2135.79	106.8	2097.24 104.	9 P			
Mercury			]	2.0	1.98	99.0	1.96 98.	0 CV			
Lead				2000.0	<b>2199.</b> 19	110.0	2067.39 103.	4 P			
Magnesium				2000.0	2066.36	103.3	2027.35 101.	4 P			
Manganese				2000.0	2050.46	102.5	2010.48 100.	5 P			
Nickel				2000.0	<b>2190</b> .65	109.5	2110.37 105.	5 P			
Potassium				10000.0	10076.35	100.8	9719.82 97.	2 P			
Selenium				2000.0	2096.37	104.8	2018.38 100.	9 P			
Silver				500.0	484.04	96.8	493.12 98.	6 P			
Sodium				2000.0	1985.00	99.2	1824.32 91.	2 P			
Thallium				2000.0	2062.26	103.1	2002.70 100.	1 P			
Vanadium				2000.0	2027.07	101.4	2027.73 101.	4 P			
Zinc				2000.0	2094.25	104.7	2060.32 103.	0 P			

### 2A

### INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name:	Adirondack 1	Environmenta	1	Contract:	Black Ash	Pond	
Lab Code:	AES	Case No.:	ESE 0701	SAS No.:		SDG No.:	SW-1-SU-7
Initial Ca	libration Sour	ce: EPA-IC	.v				
Continuing	Calibration S	ource: EPA	-LV				

Concentration Units: ug/L

	Initia	al Calibratio	on		Continuing	Calibra	ation		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found f	kR(1)	м
Aluminum				2000.0	<b>2167.</b> 37	108.4	2146.32	107.3	P
Antimony				2000.0	<b>1963.</b> 59	98.2	1974.77	98.7	Р
Arsenic				2000.0	<b>2029.</b> 21	101.5	2003.89	100.2	Р
Barium			1	2000.0	2071.92	103.6	2051.46	102.6	Р
Beryllium				2000.0	<b>2051</b> .85	102.6	2037.37	101.9	P
Cadmium				2000.0	2130.77	106.5	2110.60	105.5	P
Calcium				2000.0	<b>2038.1</b> 9	101.9	2019.03	101.0	Р
Chromium				2000.0	2012.09	100.6	1996.78	99.8	P
Cobalt				2000.0	<b>2075</b> .03	103.8	2041.86	102.1	Р
Copper				2000.0	2030.61	101.5	2011.47	100.6	P
Iron				2000.0	2116.94	105.8	2082.34	104.1	Р
Mercury				2.0	1.95	97.5			CV
Lead				2000.0	2091.74	104.6	2058.90	102.9	P
Magnesium				2000.0	2047.86	102.4	2025.98	101.3	P
Manganese				2000.0	2030.97	101.5	2001.34	100.1	P
Nickel			Ι I	2000.0	<b>2123</b> .21	106.2	2093.92	104.7	P
Potassium				10000.0	9855.22	98.6	9715.82	97.2	P
Selenium				2000.0	2035.72	101.8	1995.75	99.8	Р
Silver				500.0	490.33	98.1	488.92	97.8	P
Sodium				2000.0	1847.46	92.4	1824.10	91.2	P
Thallium				2000.0	2016.30	100.8	1987.23	99.4	P
Vanadium				2000.0	2030.56	101.5	1998.75	99.9	P
Zinc				2000.0	2073.95	103.7	2042.99	102.1	P

#### 2A

### INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name:	Adirondack Environ	mental	_Contract:	Black Ash H	Pond		
Lab Code:	AES Case	No.: ESE 0701	SAS No.	:	_	SDG No.:	<u>SW-1-SU-7</u>
Initial Cal	ibration Source:	EPA-ICV		· —			
Continuing	Calibration Source:	EPA-LV					

Concentration Units: ug/L

	Initia	al Calibratic	m		Continuing	Calibra	ation		
Analyte	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	м
Aluminum				2000.0	2117.47	105.9			P
Antimony				2000.0	<b>1986.</b> 61	99.3			Р
Arsenic			1	2000.0	2000.72	100.0			P
Barium				2000.0	<b>2043</b> .62	102.2			P
Beryllium			<u> </u>	2000.0	<b>2028</b> .87	101.4			P
Cadmium			1	2000.0	<b>2105</b> .54	105.3			P
Calcium				2000.0	<b>2017.</b> 08	100.9		1	P
Chromium				2000.0	<b>1996.</b> 30	99.8			P
Cobalt				2000.0	2043.56	102.2			P
Copper				2000.0	2010.20	100.5		1	Р
Iron			1	2000.0	<b>2079.</b> 37	104.0			P
Lead				2000.0	2141.73	107.1			P
Magnesium				2000.0	2019.24	101.0			P
Manganese				2000.0	2003.73	100.2			P
Nickel				2000.0	2091.42	104.6		1	P
Potassium				10000.0	<b>9678.2</b> 6	96.8			P
Selenium				2000.0	<b>2002.</b> 97	100.1			P
Silver			ļ	500.0	<b>487</b> .67	97.5			P
Sodium				2000.0	1817.31	90.9			P
Thallium				2000.0	<b>1986.</b> 57	99.3			Р
Vanadium				2000.0	<b>1996.</b> 16	99.8			P
Zinc				2000.0	<b>2042</b> .23	102.1			Р

### 2B-IN

## CRDL STANDARD FOR AA AND ICP

Lab Name	e: Adirondack	Environ	ental	Contract:	Black	Ash	Pond		
Lab Cod	e: <u>AES</u>	Case No.	ESE 0701	SAS No.	: _			SDG No.:	<u>SW-1-SU-7</u>
AA CRDL	Standard Source:								
ICP CRDI	L Standard Source		DR-VEN						

Concentration Units: ug/L

					CRDL Star	ndard f	or ICP	
					itial		Fina	1
Analyte	True	Found	%R	True	Found	ŧR	Found	%R
Antimony			1	120.0	96.85	80.7	105.23	87.7
Arsenic			1	20.0	20.45	102.2	21.56	107.8
Beryllium			1	10.0	9.71	97.1	8.71	87.1
Cadmium				10.0	9.94	99.4	8.66	86.6
Chromium				20.0	19.59	98.0	16.44	82.2
Cobalt				100.0	99.38	99.4	87.24	87.2
Copper				50.0	50.28	100.6	39.66	79.3
Lead				6.0	5.38	89.7	5.22	87.0
Manganese				30.0	29.45	98.2	24.85	82.8
Nickel				80.0	82.95	103.7	74.82	93.5
Selenium				10.0	10.23	102.3	9.07	90.7
Silver				20.0	19.91	99.6	15.19	76.0
Thallium				20.0	20.18	100.9	16.95	84.8
Vanadium				100.0	92.77	92.8	88.15	88.2
Zinc				40.0	40.78	102.0	37.03	92.6

Control Limits: no limits have been established by EPA at this time

### 3

### BLANKS

Lab Name: Adirondack Environmental Contract: Black Ash Pond

.

Lab Code: AES Case No.: ESE 0701 SAS No.: SDG No.: SW-1-SU-7

Preparation Blank Matrix (soil/water): WATER

UG/L Preparation Blank Concentration Units (ug/L or mg/kg):

	Initial Calib. Blank		C	ontinuing Cal Blank (ug/	Libı /L)	ration		Preparation Blank		
Analyte	(ug/L) C	1	с	2	с	З	С		С	м
Aluminum	15.1 B	17.9	в	9.2	В	8.3	в	9.182	B	P
Antimony	16.2 U	16.2	ס	16.2	ש	16.2	υ	16.200	υ	P
Arsenic	2.4 U	2.4	U	2.4	ש	2.4	σ	2.400	υ	Ĵ Ρ
Barium	3.4 U	3.4	σ	3.4	ש	3.4	υ	3.400	υ	P
Beryllium	0.3 U	0.3	σ	0.3	ប	0.3	ប	0.300	U	P
Cadmium	0.5 ប	0.5	υ	0.5	ש	0.5	U	0.500	υ	P
Calcium	6.9 U	6.9	υ	6.9	Ū	6.9	0	6.900	υ	P
Chromium	2.7 U	2.7	σ	2.7	ש	2.7	σ	2.700	U	P
Cobalt	U.9 U	0.9	σ	0.9	ש	0.9	υ	0.900	υ	P
Copper	2.0 บ	2.0	υ	2.0	υ	2.0	σ	2.000	υ	P
Iron	7.3 ប	12.5	в	7.3	U	7.3	ש	7.300	υ	P
Mercury	0.06 ប	0.06	ס	0.06	υ	0.06	υ	0.210		CV
Lead	1.6 U	1.6	υ	1.6	ס	1.6	υ	1.600	U	P
Magnesium	9.2 U	9.2	σ	9.2	U	9.2	σ	9.200	υ	P
Manganese	0.3 U	0.3	U	0.3	U	0.3	υ	0.300	U	P
Nickel	0.9 U	0.9	U	0.9	U	0.9	υ	0.900	υ	P
Potassium	3.2 U	3.2	ס	3.2	U	3.2	υ	3.200	υ	P
Selenium	2.4 U	2.4	σ	2.4	υ	2.4	U	2.400	υ	P
Silver	1.8 U	1.8	ס	1.8	σ	1.8	σ	1.800	υ	P
Sodium	8.6 U	8.6	σ	8.6	υ	B.6	σ	25.579	в	P
Thallium	1.6 U	1.6	U	1.6	U	1.6	U	7.362	в	P
Vanadium	4.2 U	4.2	σ	4.2	υ	4.2	υ	4.200	U	P
Zinc	0.7 U	0.7	U	0.7	υ	0.7	υ	0.700	υ	P

### 3

#### BLANKS

Lab Name: Adirondack Environmental Contract: Black Ash Pond

Lab Code: AES Case No.: ESE 0701 SAS No.: SDG No.: SW-1-SU-7

Preparation Blank Matrix (soil/water): WATER

UG/L Preparation Blank Concentration Units (ug/L or mg/kg):

	Initial Calib. Blank			Co	ontinuing Cal Blank (ug/	ibı 'L)	ation		Preparation Blank		
Analyte	(ug/L)	С	1	С	2	с	3	с		с	м
Aluminum	1	Ī	29.8	в	7.8	B	9.7	в		-	P
Antimony			16.2	U	16.2	υ	16.2	υ			P
Arsenic		-	2.4	ע	2.4	ס	2.4	υ			P
Barium			3.4	ប	3.4	ס	3.4	υ			P
Beryllium			0.3	ש	0.3	ס	0.3	υ			P
Cadmium			0.5	U	0.5	U	0.5	υ			P
Calcium			6.9	ש	6.9	ש	6.9	υ			P
Chromium			2.7	ש	2.7	σ	2.7	ΰ			P
Cobalt			0.9	סן	0.9	ס	0.9	υ			P
Copper			2.0	ש	2.0	ס	2.0	Ü			P
Iron			7.3	ש	7.3	U	7.3	U			P
Mercury			0.06	ס	0.06	U					CV
Lead			1.6	ט	1.6	ט	1,6	σ			P
Magnesium			9.2	ש	9.2	υ	9.2	σ			P
Manganese			0.3	ס	0.3	ס	0.3	σ			P
Nickel			0.9	ט	0.9	ס	0.9	υ			P
Potassium			3.2	ע	3.2	ס	3.2	υ			P
Selenium			2.4	U	2.4	σ	2.4	υ			P
Silver			1.8	U	1.8	ש	1.8	σ			P
Sodium		11	8.9	в	25.7	B	24.2	В			P
Thallium		1 i	1.6	ש	1.6	ס	1.6	σ			P
Vanadium		11	4.2	σ	4.2	ע	4.2	U			P
Zinc	<u> </u>	11	0.7	ש	0.7	σ	0.7	υ			P

### 3

### BLANKS

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Lab Name: Adirondack Environmental Contract: Black Ash Pond

Lab Code: <u>AES</u> Case No.: <u>ESE 0701</u> SAS No.: \_\_\_\_\_ SDG No.: <u>SW-1-SU-7</u>

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

	Initial Calib. Blank			Co	ntinuing Blank	Calib (ug/L)	rat	ion	_	Preparation Blank		
Analyte	(09/15)	С	1	С	2	С		3	с		С	м
Aluminum	]		13.7	в			[		1		1	P
Antimony			16.2	U							Í	P
Arsenic			2.4	U								P
Barium			3.4	ס			1					P
Beryllium			0.3	U		Ì		_				P
Cadmium			0.5	υ							Î	P
Calcium			6.9	U							1	P
Chromium			2.7	ע								P
Cobalt			0.9	U	-	1						P
Copper		$\mathbf{I}$	2.0	ש		1		_	1		í	P
Iron			7.3	σ				-			1	P
Lead			1.6	ש								P
Magnesium			9.2	σ		Ī						P
Manganese			0.3	ש		1						P
Nickel			0.9	υ					T Î			P
Potassium			3.2	σ	_							P
Selenium			2.4	υ		İ						P
Silver			1.8	ס		Ī						P
Sodium			8.6	U								P
Thallium			1.6	ש								P
Vanadium			4.2	υ								P
Zinc			0.7	U		i						P

#### 4

### **ICP INTERFERENCE CHECK SAMPLE**

Lab Name: Adirondack Environmental Contract: Black Ash Pond

Lab Code: <u>AES</u> Case No.: <u>ESE 0701</u> SAS No.: <u>SDG No.: SW-1-SU-7</u>

ICP ID Number: ICP4

ICS Source: EPA

\_\_\_\_\_

Concentration Units: ug/L

\_\_\_\_\_

	True		Initial Found			Final Found		
Analyte	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	₽R
Aluminum	500000	500000	449534	440814.1	88.2	376428	419163.6	83.8
Barium	1	500		477.2	95.4		490.6	98.1
Beryllium		500		449.8	90.0		460.2	92.0
Cadmium	ļ.	1000		967.1	96.7		989.9	99.0
Calcium	500000	500000	348792	348086.8	69.8	341746	351115.3	70.2
Chromium		500		458.2	91.6	· · · · · · · · · · · · · · · · · · ·	471.4	94.3
Cobalt		500		418.8	83.8		412.7	82.5
Copper		500		420.7	84.1		437.1	87.4
Iron	200000	200000	117784	117885.4	58.9	111164	119560.1	59.8
Lead		1000		1001.8	100.2		1024.6	102.5
Magnesium	500000	500000	425193	419570.3	83.9	396985	433702.1	86.7
Manganese		500	_	477.1	95.4		491.6	98.3
Nickel		1000		806.1	80.6		829.7	83.0
Silver	1	1000		906.3	90.6		929.8	93.0
Vanadium		500		439.0	87.8		459.3	91.9
Zinc		1000		916.4	91.6		947.1	94.7
### 5A

### SPIKE SAMPLE RECOVERY

							SAM	PLE NO.		
							S₩-1:	1-SU-7MS		
ab Na	ame: <u>Adirond</u>	lack Envir	onmental	Cor	tract: Black Ash	ı P	ond			
ab Co	ode: <u>AES</u>	Case N	NO.: ESE 0701 SAS	5 N	o.:		SDG No.: SW	-1-su-7		
atrix	trix (soil/water): WATER Level (low/mod): IOW									
Soli	ids for Sample	e: 0.0		-	<u></u>					
		Cond	centration Units (ug,	/L	or mg/kg dry weight	:):	UG/I.	-		
	Analyte	Control Limit %R	Spiked Sample Result (SSR)	с	Sample Result (SR)	с	Spike Added (SA)	₽R	Q	м
ļ	Aluminum	75 - 125	2218.5350		127.0334	в	2000.00	104.6		P
	Antimony	75 - 125	549.0710		16.2000	υ	500.00	109.8	1	P
İ	Arsenic	75 - 125	45.0405		2.4000	υ	40.00	112.6		P
İ	Barium	75 - 125	2123.2930		8.5331	B	2000.00	105.7	1	P
İ	Beryllium	75 - 125	56.2271		0.3000	υ	50.00	112.5		P
İ	Cadmium	75 - 125	52.0083		0.5000	U	50.00	104.0	T	P
ļ	Calcium		17964.8500		17224.6538		0.00	0.0		P
ĺ	Chromium	75 - 125	207.5372		2.7000	σ	200.00	103.8		P
İ	Cobalt	75 - 125	521.0366		0.9000	σ	500.00	104.2		P
İ	Copper	75 - 125	261.9356		11.9008	в	250.00	100.0		P
ĺ	Iron	75 - 125	1369.1310		256.1508		1000.00	111.3		Р
Ī	Mercury	75 - 125	1.6500		0.1700	в	2.00	74.0	N	CV
	Lead	75 - 125	18.5130		1.6000	υ	20.00	92.6		P
ĺ	Magnesium		4567.3650	B	4399.1669	B	0.00	0.0		P
Ī	Manganese	75 - 125	556.5197		28.2486		500.00	105.7		Р
Ī	Nickel	75 - 125	539.7547		0.9000	σ	500.00	108.0	-	P
Ī	Potassium		679.7034	в	661.3654	B	0.00	0.0		P
Ī	Selenium	75 - 125	11.7786		2.4000	υ	10.00	117.8		P
Ī	Silver ]	75 - 125	46.1470		1.8000	σ	50.00	92.3		P
	Sodium		9829.7810		9740.7425		0.00	0.0		Р
Ī	Thallium	75 - 125	44.0802		1.6425	в	50.00	84.9		P
Ī	Vanadium	75 - 125	528.6507		4.2000	σ	500.00	105.7		P
Ī	Zinc	75 - 125	548.0071	1	3.3365	в	500.00	108.9		P
-						_				

### 5B

### POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

SW-11-SU-7A

,ab Name:	Adiror	ndack Envi	ronmenta	<u>u</u>	-	Contract: Black A	sh	Pond			
Jab Code:	AES	Case	No.: ES	E 0701	S2	AS No.:	:	SDG No.:	<u>SW-1-SU-7</u>		
latrix (soi	trix (soil/water): WATER Level (low/med): LOW										
Anal	yte	Control Limit %R	Spiked S Result	Sample (SSR)	с	Sample Result (SR)	с	Spike Added (SA)	&R	Q	м
Alumi	inum		1	3729.03		127.03	в	4000	.0 90.0		P

Aluminum	3729.03		127.03	в	4000.0	90.0	F
Antimony	924.50		16.20	υ	1000.0	92.4	P
Arsenic	77.35		2.40	υ	80.0	96.7	P
Barium	3591.13		8.53	в	4000.0	89.6	Р
Beryllium	94.63		0.30	ΰ	100.0	94.6	Р
Cadmium	93.18		0.50	υ	100.0	93.2	Р
Calcium	17041.60		17224.65		0.0	0.0	P
Chromium	358.92		2.70	σ	400.0	89.7	P
Cobalt	932.20		0.90	υ	1000.0	93.2	P
Copper	452.55		11.90	в	500.0	88.1	P
Iron	2224.05		256.15		2000.0	98.4	Р
Lead	34.42		1.60	ס	40.0	86.0	Р
Magnesium	4308.68	в	4399.17	в	0.0	0.0	Р
Manganese	973.98		28.25		1000.0	94.6	 Р
Nickel	968.06		0.90	υ	1000.0	96.8	Р
Potassium	652.64	в	661.37	в	0.0	0.0	Р
Selenium	24.78		2.40	υ	20.0	123.9	Р
Silver	83.98		1.80	υ	100.0	84.0	 P
Sodium	9899.61		9740.74		0.0	0.0	Р
Thallium	80.33		1.64	в	100.0	78.7	Р
Vanadium	911.44		4.20	U	1000.0	91.1	P
Zinc	975.11		3.34	в	1000.0	97.2	P

## 6

## DUPLICATES

					SHMP	LE NU.		
				S	W-11	L-SU-7DP		
Lab Name: Adiron	dack Environme	ntal Contract:	Bla	ck Ash Pond				
Lab Code: AES	Case No.:	ESE 0701 SAS N	ío.:	SDG No.	: 5	5W-1-SU-7		
Matrix (soil/water)	: WATER	Level (	Low/I	ned): LOW				
% Solids for Sample	: _0.0	% Solids fo	r Duj	plicate: 0.0				
	Concentration	n Units (ug/L or mg/k	g dr	y weight): UG/	′L	-		
Analyte	Control		_					<b>—</b>
		Sample (S)		Duplicate (D)	<u> </u>	RPD	Q	M
Aluminum		127.0334	В	131.5536	B	3.5	<u> </u>	P
Antimony		16.2000	ש	16.2000	שע		ļ	P
Arsenic		2.4000	U	2.4000	טע	-		P
Barium		8.5331	В	8.5142	2 B	0.2	L	P
Beryllium		0.3000	υ	0.3000	ע			P
Cadmium		0.5000	σ	0.5000	ט			P
Calcium	5000.0	17224.6538		17209.7900		0.1		P
Chromium		2.7000	σ	2.7000	שו			Р
Cobalt		0.9000	υ	0.9000	סו		[	P
Copper		11.9008	B	10.6302	B	11.3		P
Iron	100.0	256.1508	]	255.5509		0.2		Р
Mercury		0.1700	в	0.1200	в	34.5		CV
Lead		1.6000	υ	1.6000	υ			P
Magnesium		4399.1669	в	4380.7810	в	0.4		P
Manganese	15.0	28.2486		28.1704		0.3		P
Nickel		0.9000	σ	0.9000	υ			P
Potassium	li li	661.3654	в	657.8484	в	0.5		P
Selenium		2.4000	U	2.4000	U			P
Silver		1.8000	σ	1.8000	U	∦		P
Sodium	5000.0	9740.7425		9879.9960	1	1.4	-	P
Thallium		1.6425	в	2.6104	в	45.5		P
Vanadium		4.2000	υ	4.2000	υ		-	P
Zinc		3.3365	в	3 3067	B		-	P
				L	12	1 4.2 1		( <sup>-</sup>

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#### LABORATORY CONTROL SAMPLE

 Lab Name:
 Adirondack Environmental
 Contract:
 Black Ash Pond

 Lab Code:
 AES\_\_\_\_\_\_
 Case No.:
 ESE 0701
 SAS No.:
 SDG No.:
 SW-1-SU-7\_\_\_\_\_

Solid LCS Source:

Aqueous LCS Source: EPA-ICV

\_\_\_\_\_

	Aqueou	ıs (ug/L)			Solid	(	mg/kg)	
Analyte	True	Found	€R	True	Found	С	Limits	ŧR
Aluminum	2000.0	2173.3680	108.7			1		
Antimony	2000.0	1955.5100	97.8		1	1		
Arsenic	2000.0	2040.8890	102.0			1		
Barium	2000.0	2028.5740	101.4		1	l		
Beryllium	2000.0	2068.3420	103.4		J			L
Cadmium	2000.0	2113.9860	105.7		1			
Calcium	2000.0	2067.4340	103.4		]			
Chromium	2000.0	1987.1780	99.4		1			
Cobalt	2000.0	2086.8730	104.3		1			
Copper	2000.0	1986.3560	99.3		1			
Iron	2000.0	2119.7780	106.0		1	Γ		
Mercury	2.0	1.80	90.0					
Lead	2000.0	2218.8840	110.9					
Magnesium	2000.0	2040.7490	102.0		1			L
Manganese	2000.0	2021.1060	101.1					L
Nickel	2000.0	2145.5090	107.3		<u> </u>			
Potassium	10000.0	9881.8280	98.8		1			
Selenium	2000.0	2054.0590	102.7					[
Silver	500.0	481.7151	96.3		[			
Sodium	2000.0	1906.12	95.3					
Thallium	2000.0	2186.5760	109.3		1			
Vanadium	2000.0	2031.8420	101.6					
Zinc	2000.0	2071.0400	103.6					

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#### STANDARD ADDITION RESULTS

 Contract:
 Black Ash Pond

 Lab Code:
 AES
 Case No.:
 ESE 0701
 SAS No.:
 SDG NO.:
 SW-1-SU-7

(Concentration Units):

ug/L

Sample ID.	An	0 ADD ABS	1 CON	ADD ABS	2 CON	ADD ABS	3. כסא	ADD	Final Conc.	r	Q

### 9 **ICP SERIAL DILUTIONS**

SAMPLE	NO.
	110.

SW-	1	1	-SU-71.
~~~	-	-	

Lab Name: Adirondack Environmental Contract: Black Ash P

Matrix (soil/water): WATER

Lab Code: AES Case No.: ESE 0701

Level (low/med):

SAS No.: \_\_\_\_\_ SDG No.: <u>SW-1-SU-7</u> LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	ر د	Serial Dilution Result (S)	c	<pre>% Differ- ence</pre>	0	м
	127.03	<u> </u>	250 00		192 //	<u> </u>	
Aluminum	127.03		333.33		105.4	<u> </u>	F
Antimony	16.20	U	91.77	В	100.0		P
Arsenic	1.62	В	12.00	ט	100.0		P
Barium	8.53	В	17.00	U	100.0		P
Beryllium	0.30	ש	1.50	U			P
Cadmium	0.50	ש	2.50	סן			P
Calcium	17224.65		19918.30	В	15.6	E	P
Chromium	2.70	ש	13.50	חן			P
Cobalt	0.90	ש	4.50	ש			P
Copper	11.90		14.97	B	25.8		P
Iron	256.15		294.04	В	14.8		P
Lead	1.60	ש	8.00	ט			P
Magnesium	4399.17		5388.02	В	22.5	E	P
Manganese	28.25		32.04	B	13.4	E	P
Nickel	0.90	ש	4.50	ש	I. 1		P
Potassium	661.37	В	640.59	B	3.1		P
Selenium	2.40	ש	12.00	ש			P
Silver	0.47	в	9.00	U	100.0		P
Sodium	9740.74		11504.94	B	18.1	E	P
Thallium	1.64	В	10.85	B	561.6		P
Vanadium	4.20	ט	21.00	U			P
Zinc	3.34	В	4.98	В	49.1		P

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## INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: Adirondac	k Environmental	Contract	Black As	sh Pond	
Lab Code: <u>AES</u>	Case No.: ESE 0701	SAS No.:		SDG No	⊳.: <u>S₩-1-SU-7</u>
ICP ID Number:		Date:	2/6/2007		
Flame AA ID Number:	CVAA				
Furnace AA ID Number:					
	Wave-	Back-	0001		

Analyte	Wave- length (nm)	Back- ground	CRDL (ug/L)	IDL (ug/L)	м
Mercury	253.70		0.20	0.06	CV
		-			

### 10

### **INSTRUMENT DETECTION LIMITS (QUARTERLY)**

Lab Name: Adirondack Environmental	Contract: Black Ash Pond
Lab Code: <u>AES</u> Case No.: <u>ESE 0701</u>	SAS No.: SDG No.:
ICP ID Number: ICP4	Date: <u>2/6/2007</u>
Flame AA ID Number:	

Furnace AA ID Number:

\_

Analyte	Wave- length (nm)	Back- ground	CRDL (ug/L)	IDL (ug/L)	м
Aluminum	308.22		200	5.2	Р
Antimony	206.83		60	16.2	Р
Arsenic	189.04		10	2.4	Р
Barium	493.41		200	3.4	P
Beryllium	313.04		5	0.3	Р
Boron	249.68		50	7.4	P
Cadmium	226.50		5	0.5	P
Calcium	317.93		5000	6.9	Р
Chromium	267.72		10	2.7	Р
Cobalt	228.62		50	0.9	P
Copper	324.75	1	25	2.0	Р
Iron	271.44	1	100	7.3	Р
Lead	220.35		3	1.6	Р
Magnesium	279.08		5000	9.2	P
Manganese	257.61		15	0.3	Р
Nickel	231.60		40	0.9	P
Potassium	766.49		5000	3.2	P
Selenium	196.02		5	2.4	P
Silver	328.07		10	1.8	Р
Sodium	588.9		5000	8.6	P
Thallium	190.86		10	1.6	P
Vanadium	292.40		50	4.2	Р
Zinc	206.2		20	0.7	P

### 11A ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name:	Adirondack Envi	ronmental		Contract:	Black Ash	Pond	
Lab Code:	AES	Case No.:	ESE 0701	SAS No.:		SDG No.:	<u>SW-1-SU-7</u>
ICP ID Num	ber: ICP4			Date: <u>4</u>	/5/2007		

	Wave-	<u> </u>				
	length		Interelement	t Correction F	actors for:	
Analyte	(nm)	Al	Ca	Fe	Mg	Rh
Aluminum	308.20	0.0000000	0.000000	0.000000	0.0000000	
Antimony	206.80	0.0000000	0.000000	0.0000000	0.0000000	
Arsenic	193.70	0.0001270	0.0000000	0.000000	0.0000000	
Barium	493.40	0.0000000	0.000000	0.0000000	0.0000000	
Beryllium	313.00	0.0000000	0.000000	0.000000	0.0000000	
Cadmium	228.80	0.0000000	0.000000	0.000000	0.000000	·
Calcium	317.90	0.0000000	0.000000	0.000000	0.0000000	
Chromium	357.80	0.0000000	0.000000	0.0001400	0.0000000	
Cobalt	228.60	0.0000000	0.000000	0.000000	0.0000000	· · · · · · · · · · · · · · · · · · ·
Copper	324.70	0.0000000	0.000000	0.000000	0.0000000	<u> </u>
Iron	259.90	0.0001900	0.000000	0.0000000	0.000000	
Lead	220.30	0.0001020	0.000000	0.0008420	0.000000	
Magnesium	383.80	0.0000000	0.0000000	0.000000	0.0000000	
Manganese	257.61	0.0000000	0.000000	0.000000	0.0000000	······································
Nickel	231.60	0.0000000	0.0000000	0.000000	0.000000	
Potassium	766.49	0.0000000	0.000000	0.000000	0.0000000	
Selenium	196.00	0.0000000	0.0000000	0.000000	0.0000000	
Silver	328,00	0.0000000	0.000000	0.000000	0.0000000	
Sodium	588.90	0.0000000	0.000000	0.000000	0.000000	· · ·
Thallium	190.80	0.0000000	0.0008600	0.000000	0.000000	
Tin	189.90	0.000000	0.000000	0.000000	0.000000	
Vanadium	292.40	0.0006000	0.000000	0.0000000	0.000000	
Zinc	213.80	0.0000000	0.000000	0.0001040	0.000000	

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## **ICP LINEAR RANGES (QUARTERLY)**

Lab Name: Adirondack E	nvironmental	Cont	ract: <u>Black Ash P</u>	ond
Lab Code: <u>AES</u>	Case No.:	ESE 0701 SAS	No.:	SDG No.: SW-1-SU-7
ICP ID Number: <u>ICP4</u>		Dat	e: <u>2/10/2007</u>	_
	Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
	Aluminum	60.00	250000.0	P
	Antimony	60.00	50000.0	P
	Arsenic	60.00	100000.0	P
	Barium	60.00	10000.0	P
	Beryllium	60.00	10000.0	P
	Boron	60.00	50000.0	P
	Cadmium	60.00	10000.0	P
	Calcium	60.00	200000.0	P
	Chromium	60.00	10000.0	P
	Cobalt	60.00	50000.0	P
	Copper	60.00	100000.0	P
	Iron	60.00	80000.0	P
	Lead	60.00	200000.0	P
	Magnesium	60.00	500000.0	[P]
	Manganese	60.00	10000.0	P
	Nickel	60.00	200000.0	P
	Potassium	60.00	100000.0	P
	Selenium	60.00	10000.0	P
	Silver	60.00	50000.0	P
	Sodium	60.00	50000.0	P
	Thallium	60.00	100000.0	P
	Vanadium	60.00	50000.0	P
	Zinc	60.00	10000.0	P

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### PREPARATION LOG

Lab Name:	Adirondack	Environmental	Contract:	Black Ash Pond	
Lab Code:	AES	Case No.: <u>ESE 0701</u>	SAS No.:	SDG No.:	<u>SW-1-SU-7</u>

Method: CV

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
LCSW	6/26/2007	100.0 [	100.0
PBW	6/26/2007	100.0	100.0
SW-10-SU-7	6/26/2007	100.0	100.0
SW-11-SU-7	6/26/2007	100.0	100.0
SW-11-SU-7DP	6/26/2007	100.0	100.0
SW-11-SU-7MS	6/26/2007	100.0	100.0
SW-1-SU-7	6/26/2007	100.0	100.0
SW-2-SU-7	6/26/2007	100.0	100.0
SW-3-SU-7	6/26/2007	100.0	100.0
SW-6-SU-7	6/26/2007	100.0	100.0
SW-9-SU-7	6/26/2007	100.0 (	100.0

### 13

## PREPARATION LOG

Lab Name:	Adirondack	Environmental	Contract:	Black Ash Pond	
Lab Code:	AES	Case No.: <u>ESE 0701</u>	SAS No.:	SDG No.:	<u>SW-1-SU-7</u>

Method: P\_\_\_\_\_

EPA Sample No.	Preparation Date	Initial Volume mL	Volume (mL)
LCS-W, IW	6/26/2007	100.0	100.0
MBLK, IW	6/26/2007	100.0	100.0
SW-10-SU-7	6/26/2007	100.0	100.0
SW-11-SU-7	6/26/2007	100.0	100.0
SW-11-SU-7DP	6/26/2007	100.0	100.0
SW-11-SU-7MS	6/26/2007	100.0	100.0
SW-1-SU-7	6/26/2007	100.0	100.0
SW-2-SU-7	6/26/2007	100.0	100.0
SW-3-SU-7	6/26/2007	100.0	100.0
SW-6-SU-7	6/26/2007	100.0	100.0
SW-9-SU-7	6/26/2007	100.0	100.0

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## ANALYSIS RUN LOG

Lab Name: Adirondack Environmental								С	Contract: Black Ash Pond																		
Lab Code: <u>AES</u>		Case	No.:	ES	E (	070	1	S	AS	Nc	. :					_	S	DG	No	».:	ŝ	<u>w-</u>	<u>1-8</u>	SU-	-7_		
Instrument ID Number:	_ICP4							М	let	hoć	l:	_	P		_	_											
Start Date: <u>7/18/200</u>	07							E	nd	Da	te	:	7/	<u>18</u>	/20	007	7		_								
EPA													2	Ana	ly	ces	3										
Sample No.	D/F	Time	% R	A L	S B	A S	B A	B E	כ ס	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	ĸ	S E	A G	N A	T L	v	Z N	C N
Blank	1.00	1037		X	х	х	х	X	х	х	х	x	х	х	X	X	х		Х	X	X	Х	х	X	x	X	
200.7-1	1.00	1041		X						X						x	0		x	X			x			X	
200.7-2	1.00	1045		Ī			x	х				x	x	x			х										
200.7-3	1.00	1049							x						x									x			
200.7-4	1.00	1101			х																						
1 PPM AG	1.00	1110																				X					
200.7	1.00	1114		1		x					X										X				x		
ICV-1	1.00	1139		X	x	x	x	x	x	x	x	x	x	x	X	X	х		х	х	х	x	X	X	x	х	
ICB-1	1.00	1140		X	x	x	X	x	x	x	X	x	х	x	X	X	х		X	X	х	X	x	X	x	х	
CRI-1	1.00	1145			X	x		x	x		x	x	x		X	- 0.	х		x		х	x		X	x	x	
ICSA-1	1.00	1150	-	X		1				X				х		X											
ICSAB-1	1.00	1202		X			x	x	X	x	x	x	х	х	х	х	X		x			х			x	x	
CCV-1	1.00	1207		x	x	X	X	x	X	X	X	x	х	x	X	X	X		X	X	X	x	x	Х	x	х	
CCB-1	1.00	1211		X	x	x	x	x	x	x	х	x	x	x	X	x	X		x	X	X	х	x	Х	x	x	
ccv-2	1.00	1403		X	X	x	X	X	X	x	x	x	х	x	X	X	X		X	X	X	X	X	X	x	X	
CCB-2	1.00	1405		X	x	x	x	X	X	x	x	x	x	x	x	x	X		X	X	X	x	x	X	x	x	
MBLK, IW	1.00	1447		X	x	X	X	x	X	x	X	x	x	x	X	X	X		X	X	X	x	x	X	x	X	
LCS-W, IW	1.00	1452	[	X	X	x	X	x	X	x	x	x	x	x	X	X	X		x	X	X	x	X	X	x	X	
SW-1-SU-7	1.00	1457		X	x	x	x	x	X	X	x	x	x	х	X	x	X		X	X	X	X	X	x	x	X	
SW-2-SU-7	1.00	1501		X	x	x	x	x	X	x	x	x	x	x	х	x	X		х	X	X	x	x	X	x	X	
CCV-3	1.00	1512		X	x	X	X	x	x	X	X	x	X	х	X	Х	X		x	X	X	x	X	X	x	X	
ССВ-3	1.00	1515	<u>.</u>	X	x	x	X	x	x	X	X	x	x	х	X	x	X		x	X	x	x	x	x	x	X	
SW-3-SU-7	1.00	1519	Ú	X	X	x	X	X	X	x	X	x	x	X	X	X	Х		X	X	X	X	X	X	x	X	
SW-6-SU-7	1.00	1524	0	X	x	x	x	x	X	x	x	x	x	х	X	x	X		x	X	x	х	x	X	x	X	
SW-9-SU-7	1.00	1529	Ú.	X	x	x	X	x	x	X	x	x	x	х	X	X	X		x	X	X	X	x	X	x	X	
SW-10-SU-7	1.00	1532		X	x	x	x	x	x	X	x	x	x	х	х	х	х		x	X	x	x	X	x	x	X	
SW-11-SU-7	1.00	1538		X	X	x	X	x	X	X	x	x	x	X	х	x	X		X	X	X	x	X	X	x	X	
SW-11-SU-7DP	1.00	1542		X	x	x	x	X	x	X	X	x	x	х	x	x	X		X	X	x	X	X	x	X	X	
SW-11-SU-7MS	1.00	1547		X	x	x	X	x	X	X	X	x	X	x	Х	Х	X		X	X	X	X	X	X	x	x	
SW-11-SU-7A	1.00	1551		x	x	x	x	x	X	X	X	x	x	x	X	х	x		X	X	x	X	X	X	x	x	
SW-11-SU-7L	5.00	1556		x	X	x	X	X	X	X	X	x	x	x	х	x	X		X	X	X	X	X	X	x	X	
CCV-4	1.00	1600		x	x	x	x	x	X	X	X	x	x	X	x	x	X		x	X	X	X	X	X	x	X	
ССВ-4	1.00	1606		X	x	x	X	X	X	x	X	x	x	X	X	x	X		X	X	X	х	X	X	x	X	
	1.00	1714		Ix	X	x	X	x	X	X	X	x	x	x	X	x	X		X	X	x	X	x	X	x	X	

xx

1.00 1723

1.00 1810

1.00 1814

1.00 1818

CCB-5

CCV-6

CCB-6

CRI-2

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### 14

#### ANALYSIS RUN LOG

 Lab Name:
 Adirondack Environmental
 Contract:
 Black Ash Pond

 Lab Code:
 AES\_\_\_\_\_\_
 Case No.:
 ESE 0701
 SAS No.:
 SDG No.:
 SW-1-SU-7

 Instrument ID Number:
 ICP4
 Method:
 P
 End Date:
 7/18/2007

EPA	_ (_													Ana	ily	te	5										
Sample No.	D/F	Time	¥ R	A L	S B	A S	B A	B E	C D	C A	C R	с 0	D C	F E	P B	M G	M N	н G	N I	ĸ	S E	A G	N A	T L	v	Z N	С N
ICSA-2	1.00	1822		X						х				X		х											Ĩ
ICSAB-2	1.00	1826		X			X	X	x	x	X	x	Х	x	x	X	X		x			x			x	x	
ccv-7	1.00	1830		x	x	x	x	x	x	x	x	x	х	x	x	х	X		х	X	X	x	X	X	x	X	
CCB-7	1.00	1833		x	x	x	x	x	x	X	x	x	x	х	x	X	X	[	$\mathbf{x}$	X	X	x	x	x	x	X	

14

## ANALYSIS RUN LOG

Lab Name: Adirondack Environmental								C	lon.	tra	ct	:	<u>B1</u>	ac	<u>k</u>	Asl	h I	?on	d								
Lab Code: <u>AES</u>		Case	No.:	ES	E (	070	1	S	AS	No	.:				_	_	s	SDG	No	o.:	S	<del>W</del> -	1-	<u>5U-</u>	-7		
Instrument ID Number:	CVAA							M	let)	hod	l:	_	cv														
Start Date: <u>6/27/200</u>	07							E	nd	Da	te	:	<u>6/</u>	<u>27</u>	/20	00	7		_								
EPA			-				-						J	\na	ly	ces	3										_
Sample	D/F	Time	₩ R	A	S	A	в	в	С	С	С	С	С	F	P	м	М	H	N	K	s	A	N	Т	V	Z	с
NO.				L	в	s	Α	E	D	A	R	0	σ	E	в	G	N	G	Ι		E	G	A	ľ		N	N
ICV	1.00	1133																X								Πİ	Ť
ICB	1.00	1135																x								$\Box$	
CCV	1.00	1154																x									
ССВ	1.00	1156																X									1
ccv	1.00	1215																X									
ССВ	1.00	1216																x									
ccv	1.00	1235													_			X				$\Box$					
ССВ	1.00	1237																X									
PBW	1.00	1245																X									
LCSW	1.00	1247																x									
SW-1-SU-7	1.00	1249																X									
SW-2-SU-7	1.00	1250																x									
SW-3-SU-7	1.00	1252																X									
SW-6-SU-7	1.00	1254																X									
ccv	1.00	1256																x			$\Box$						
ССВ	1.00	1257																x									
SW-9-SU-7	1.00	1259																x		Ĺ							
SW-10-SU-7	1.00	1301																X									
SW-11-SU-7	1.00	1302																_x									
SW-11-SU-7DP	1.00	1304																X									
SW-11-SU-7MS	1.00	1306																x									
CCV	1.00	1316	_															x									Ī
CCB	1.00	1341																x									

RAW QC

DATA

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ethod: SH	PEX Sample Name:	Blank	Operat	or:	
omment: un Tíme:	07/18/07 10:37 Type:	Std Mode:	IR Corr.	Fact: 1.000000	
lem	Ag3280	A13002	Al3961	As1937	Au2427
ine	328.068 {102}	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 {138}
nits	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
.vg	.0263	.3685	.0430	.1083	0997
tddev	.0215	.0156	.0803	.0179	.0476
RSD	81.87	4.239	187.0	16.51	47.73
1	.0416	.3796	0139	.1209	0660
2	.0111	.3575	.0998	.0957	1333
lem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
ine	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Inits	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Nyg	.1691	2.441	.7578	.0219	0208
Itddev	.0061	.039	.0214	.0022	.0411
RSD	3.622	1.591	2.830	9.970	198.0
1	.1648	2.469	.7730	.0204	.0083
2	.1734	2.414	.7426	.0235	0499
llem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 (147)	228.616 (147)	357.869 { 94}	324.754 [103]	259.940 (129)
Jnits	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Lvg	0796	.0105	.0554	.1787	.5702
Stddev	.0340	.0550	.0039	.0020	.0184
MRSD	42.75	524.2	7.057	1.110	3.223
⊭1	1037	.0494	.0582	.1773	.5572
⊮2	0555	0284	.0527	.1801	.5832
<pre>5lem Line Jnits Avg Stddev %RSD</pre>	Ge2068	In2306	K_7664	Li6103	Mg3838
	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 [ 87]
	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
	.1247	.0268	1.643	-37.40	~.0346
	.0070	.0004	.196	.29	.0098
	5.611	1.608	11.94	.7720	28.30
#1	.1197	.0271	1.505	-37.60	0277
#2	.1296	.0265	1.782	-37.19	0416
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.4665	.0083	-64.18	12.63	0457
Stddev	.0226	.0275	1.75	.61	.0384
&RSD	4.854	330.0	2.724	4.807	84.10
#1	.4825	.0278	-65.42	12.20	0185
#2	.4505	0111	-62.95	13.06	0728
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 (149)	220.353 (152)	324.270 {103)	203.646 {164}	214.423 {156}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	5591	.0441	0526	0096	.0309
Stddev	.0088	.0144	.0039	.0022	.0035
&RSD	1.570	32.63	7.458	22.81	11.32
#1	5529	.0543	0499	0080	.0284
#2	5653	.0339	0554	0111	.0333

ample Name: Blank Run Time: 07/18/07 10:37

ilem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
ine	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Inits	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
vg	.3076	.0373	.0321	.0997	.0133
itddev	.0126	.0161	.0061	.0000	.0223
"RSD	4.105	43.24	19.05	.0139	167.7
:1	.3165	.0487	.0278	.0997	.0290
:2	.2987	.0259	.0364	.0998	0025
lem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Jine	346.446 { 97)	240.063 {140}	214.281 {157}	336.121 {100}	190.864 (176)
Jnits	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Vg	0224	.1213	0299	.0429	0238
Jtddev	.0035	.0214	.0074	.0059	.0109
JRSD	15.70	17.62	24.78	13.70	45.93
<b>‡1</b>	0249	.1364	0352	.0388	0160
₹2	0200	.1061	0247	.0471	0315
llem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 [115]	239.709 {140}	213.856 {157}	339.198 { 99}	
Jnits	Cts/S	Cts/S	Cts/S	Cts/S	
Avg	0083	.0898	.5751	0970	
Stddev	.0823	.0092	.0148	.1136	
&RSD	990.6	10.21	2.570	117.2	
#1	0665	.0833	.5856	0166	
#2	.0499	.0963	.5647	1773	

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lethod: S	PEX Samp	le Name:	200.7-1		O,	perator	:		
lomment: Run Time:	07/18/07 10:	41 Type:	Std	Mode:	IR	Corr.Fa	ct: 1.000000		
lem Jine Jnits Vg Itddev RSD	308.21	Al3082 5 [109} Cts/S 30.64 .19 .6328	7 396.152	A13961 { 85} Cts/S 218.7 .3 .1213	Ca 317.933 ( C 1	3179 105} 7 ts/S 91.8 .5 2754	K_7664 66.490 { 44} Cts/S 1249. 8. .6536	Mg383 383.826 { 87 Cts/ 100. 219	8 } 7 2 3
†1 ‡2		30.78 30.51		218.8 218.5	1	92.2 91.4	1255. 1243.	100. 100.	9 6
Llem Line Jnits Avg Stddev ARSD	588.99	Na5889 5 { 57} Cts/S 8698. 1. .0121	1 589.592	Na5895 { 57} Cts/S 4683. 5. .1000	Ni 231.604 { C 1	2316 145} 2 ts/S 080. 1. 0992	Zn2138 13.856 {157} Cts/S 2851. 2. .0745		
¥1 52		8699. 8697.		4686. 4679.	1	079. 081.	2849. 2852.		

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page 1

<pre>4ethod: SE Comment:</pre>	EX	Sample	Name:	200.7-2			Operat	or:			
Run Time:	07/18/07	10:45	Type:	Std	Mode:	IR	Corr.	Fact: 1.0	00000		
Elem Line Jnits Avg Stddev RSD	49	Ba 3.409 (	a4934 { 68} Cts/S 1853. B. .4426	1313.042	3e3130 (107) Cts/S 1058. 1. .0979	( 228.616	Co2286 {147} Cts/S 643.3 .7 .1116	C 324.754	u3247 {103} Cts/S 39.59 .11 .2720	н 259.940	Te2599 {129} Cts/S 5117. 20. .3921
#1 #2		-	1847. 1859.		1058. 1059.		642.8 643.8		39.66 39.51		5103. 5132.
Elem Line Units Avg Stddev %RSD	25	Мл 7.610 (	n2576 {131} Cts/S 1859. 1. .0534	346.446	Sr3464 { 97} Cts/S 177.4 .1 .0363						
#1 #2			1859. 1860.		177.3 177.4						

SUGTARTE VEDOTI		U	1/10/0	10.02:00	page
Method: SPEX	Sample Name:	200.7-3		Operat	cor:
Run Time: 07/18/0	7 10:49 Type:	Std Mo	de: IR	Corr.	Fact: 1.000000
lem	B_2496	Cd22	88 71 220	Pb2203	T11908
Juits	Cts/S	220.002 (14 Cts	/S 8	Cts/S	190.864 (176) Cts/S

Elem	B_2496	Cd2288	Pb2203	T11908
Line	249.678 {135}	228.802 [147]	220.353 {152}	190.864 (176)
Jnits	Cts/S	Cts/S	Cts/S	Cts/S
Vg	30.01	198.8	33.21	10.50
Etddev	.03	.1	.09	.03
RSD	.0947	.0591	.2582	.2871
‡1	29.99	198.7	33.15	10.52
‡2	30.03	198.8	33.27	10.47

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Method: SPEX	Sample Name:	200.7-4	Operator:	
Run Time: 07/1	8/07 11:01 Type:	Std Mode:	IR Corr.Fact:	1.000000
Elem	Mo2020	Sb2068	Ti3361	
Line	202.030 (166)	206.833 {162}	336.121 {100}	
Jnits	Cts/S	Cts/S	Cts/S	
Avg	1124.	226.8	641.1	
Stddev	17.	6.5	1.8	
irsd	1.517	2.863	.2757	
#1	1112.	222.2	642.4	
#2	1136.	231.4	639.9	

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Sethod: SI	PEX	Sample	Name:	1 PPM AG			Operator:
Run Time:	07/18/07	11:10	Type:	Std	Mode:	IR	Corr.Fact: 1.000000
lem ine Jnits Vvg Stddev RSD	32	Aq 8.068   ( 2	g3280 (102) Cts/S 32.32 .00 .0065				

32.32 32.32 |1 |2

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Sethod: SE Comment: Sun Time:	PEX Sample 07/18/07 11:14	Name: Type:	200.7 Std Mo	de: IR	Operator: Corr.Fact:	1.000000	
llem Jine Inits Vg Stddev JRSD	А 193.759	s1937 [173] Cts/S 33.30 .03 .0995	Cr35 357.869 { 9 Cts 34. .05	78 510.362 /s 28 02 35	Li6103 { 55} 196. Cts/S 413.6 .5 .1251	Sel960 090 {171} Cts/S 28.27 .19 .6852	Sn1899 189.989 {176] Cts/S 72.87 .34 .4723
1 12		33.28 33.33	34. 34.	27 29	414.0 413.3	28.13 28.41	72.62 73.11
llem Line Inits Nyg Stddev RSD	v 292.402	_2924 {115} Cts/S 24.58 .13 .5325					
⊧1 ⊧2		24.67 24.48					

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31 Name	Slope	Y-int	Correlation	Date Stdized
3a3280	0.0323	0.0263	1.0000000	07/18/07 11:13:55
130B2	0.0030	0.3685	1,0000000	07/18/07 10:44:32
113961	0 0219	0.0430	1.0000000	07/18/07 10-44-32
491937	0.0166	0.1083	1.0000000	07/18/07 11:17:34
4112427	0.0793	-0.0997	1.0000000	07/18/07 10:40:28
3 2496	0.1492	0.1691	1.0000000	07/18/07 10:52:54
384934	1.8503	2.4411	1.0000000	07/18/07 10:48:54
3e3130	1.0577	0.757B	1.0000000	07/18/07 10:48:54
311902	0.0094	0.0219	1.0000000	07/18/07 10:40:28
Ca3179	0.0192	-0.0208	1.0000000	07/18/07 10:44:32
742288	0.3977	-0.0796	1.0000000	07/18/07 10:52:54
202286	0.3216	0.0105	1.0000000	07/18/07 10:48:54
7r3578	0.0171	0.0554	1,0000000	07/18/07 11:17:34
7113247	0 0394	0.1787	1.0000000	07/18/07 10-48-54
Fe2599	0 5117	0.5702	1.0000000	07/18/07 10-48-54
Se2068	0.0077	0.1247	1.0000000	07/18/07 10:40:28
Jp2306	0.0258	0.0268	1.0000000	07/18/07 10:40:28
X 7664	0.1247	1.6435	1.0000000	07/18/07 10-44-32
136103	0.2255	-37.3973	1.0000000	07/18/07 11:17:34
Ma3838	0 0101	-0.0346	1.0000000	07/18/07 10-44-32
vin 2576	1 8588	0.4665	1.0000000	07/18/07 10:44:52
Mo2020	0 1124	0.0083	1.0000000	07/18/07 11:04:24
Va5889	0 8762	-64-1838	1.0000000	07/18/07 10-44-32
Na5895	0 4670	12.6307	1.0000000	07/18/07 10-44-32
vi2316	0 2160	-0.0457	1.0000000	07/18/07 10-44-32
1s2255	0 0371	-0.5591	1.0000000	07/18/07 10:40:28
Pb2203	0 0332	0.0441	1.0000000	07/18/07 10-52-54
Pd3242	0.0000	-0.0526	1.0000000	07/18/07 10-40-28
P+2036	-0.0007	-0.0096	-1.0000000	07/18/07 10.40.28
P+2144	0.0141	0.0309	1.0000000	07/18/07 10.40.28
R112402	0 0737	0.3076	1.0000000	07/18/07 10-40-28
Sh2068	0.0227	0.0373	1.0000000	07/18/07 11-04-24
Se1960	0 0141	0.0321	1.0000000	07/18/07 11.17.34
512881	0.0028	0.0997	1.0000000	07/18/07 10:40:28
Sp1899	0.0364	0.0133	1.0000000	07/18/07 11.17.34
5+3464	0 0177	-0.0224	1 0000000	07/18/07 10:48:54
Ta2400	-0 0101	0.1213	-1 0000000	07/18/07 10:40:28
To2142	0 0146	-0 0299	1 0000000	07/18/07 10-40-28
Ti 3361	0 0641	0.0429	1.0000000	07/18/07 11:04:24
T11908	0.0105	-0.0238	1.0000000	07/18/07 10:52:54
√ 2924	0.0123	-0.0083	1,0000000	07/18/07 11:17:34
W 2397	0.0376	0.0898	1.0000000	07/18/07 11.07.58
Zn2138	0.5701	0.5751	1.0000000	07/18/07 10:44:32
Zr3391	0.0660	-0.0970	1.0000000	07/18/07 10:40-28
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1ethod: SPEX Sample Name		ICV-1			
Comment: Run Time: 07/18/	07 11:39 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
llem	Ag3280	A13082	A13961	As1937	Au2427
Jine	328.068 {102}	308.215 (109)	396.152 { 85}	193.759 {173}	242.795 (138)
Jnits	ppb	ppb	ppm	ppb	ppb
Vg	488.5	2186.	2082.	2018.	<.0000
Stddev	.8	32.	6.	1.	.8529
HRSD	.1628	1.482	.2745	.0492	5.900
†1	489.0	2209.	2078.	2017.	<.0000
≑2	487.9	2163.	2086.	2018.	<.0000
llem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Jnits	ppb	ppb	ppb	ppm	ppb
Avg	1919.	2070.	2044.	.7908	2027.
Stddev	3.	13.	9.	.5127	4.
ARSD	.1754	.6096	.4284	64.83	.1777
⊧1	1917.	2079.	2051.	.4283	2029.
⊧2	1922.	2061.	2038.	1.153	2024.
Clem Line Jnits Avg Stddev ERSD	Cd2288 228.802 {147} ppb 2119. 6. .2678	Co2286 228.616 {147} ppb 2054. 4. .1840	Cr3578 357.869 { 94} ppb 2007.	Cu3247 324.754 {103} ppb 2016.	Fe2599 259.940 (129) ppb 2096.
₽1	2115.	2051.	2007.	2016.	2096.
₽2	2123.	2057.	2007.	2016.	2096.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Jnits	ppm	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	9756.	2002.	2042.
Stddev	.5662	.2366	44.	9.	3.
&RSD	3.399	14.67	.4523	.4497	.1227
₩1	<.0000	<.0000	9788.	1996.	2040.
₩2	<.0000	<.0000	9725.	2009.	2044.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	2007.	2082.	1827.	2030.	2106.
Stddev	5.	1.	3.	4.	2.
&RSD	.2334	.0501	.1466	.2138	.1176
#1	2004.	2082.	1825.	2033.	2104.
∯2	2010.	2083.	1829.	2027.	2107.
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 (103)	203.646 {164}	214.423 {156}
Onits	ppB	ppb	ppb	ppb	ppb
Avg	31.47	2162.	4010.	409.8	<.0000
Stddev	1.76	3.	1233.	23.8	63.83
&RSD	5.609	.1518	30.76	5.801	3.846
#1	32.72	2160.	3138.	393.0	<.0000
#2	30.22	2164.	4882.	426.6	

## Sample Name: ICV-1 Run Time: 07/18/07 11:39

Clem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 (162)	196.090 {171}	288.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	2019.	2024.	4028.	2012.
Stddev	.5623	7.	2.	2.	5.
≹RSD	18.20	.3637	.1225	.0533	.2520
⊭1	<.0000	2014.	2026.	4030.	2009.
⊭2	<.0000	2024.	2022.	4027.	2016.
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 (140)	214.281 [157]	336.121 {100}	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	2043.	23.81	<.0000	<.0000	2150.
Stddev	3.	1.60	.1785	.4588	
ARSD	.1505	6.707	.0603	12.78	.0139
∯1	2046.	24.94	<.0000	<.0000	2150.
⊮2	2041.	22.68	<.0000	<.0000	2150.
Elem	V_2924	₩_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Jnits	ppb	ppb	ppb	ppb	
Avg	2022.	<.0000	2062.	.7551	
Stddev	10.	11.49	1.	.6535	
&RSD	.5061	1.271	.0303	86.55	
₩1	2029.	<pre>&lt; .0000</pre>	2062.	1.217	
₩2	2015.	< .0000	2063.	.2930	

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dethod: SI	PEX Sample	Name: 1	ICB-1	Operat	or:	
Comment: Run Time:	07/18/07 11:40	Type: (	Unk Mode:	CONC Corr.	Fact: 1.000000	
Elem Line Jnits Avg Stddev ≹RSD	Ag 328.068 { <. 6	3280 102} ppb 0000 6068 51.50	A13082 308.215 {109} ppb 15.13 18.77 124.0	Al3961 396.152 { 85} ppm <.0000 .7171 20.57	As1937 193.759 {173} ppb .3902 .4204 107.7	Au2427 242.795 {138} ppb <.0000 .1815 116.7
<b>#1</b> #2	<. <.	0000 0000	28.40 1.862	<.0000 <.0000	.0930 .6875	<.0000 <.0000
Elem Line Units Avg Stddev %RSD	B 249.678 { 1	2496 [135] 4 ppb 5791 0702 2.13	Ba4934 493.409 [ 68} ppb .1044 .0773 74.02	Be3130 313.042 {107} ppb <.0000 .0185 289.3	Bi1902 190.241 {176} ppm 1.483 .839 56.58	Ca3179 317.933 {105} ppb 1.373 4.291 312.6
#1 #2		6287 5294	.1590 .0498	.0067 <.0000	2.077 .8898	< .0000 4.407
Elem Line Units Avg Stddev &RSD	Cd 228.802 { <. 2	12288 147} 2 ppb 0000 0922 237.6	Co2286 228.616 {147} ppb .0691 .0271 39.29	Cr3578 357.869 (94) ppb <.0000 5.497 566.1	Cu3247 324.754 {103} ppb 1.126 .845 75.05	Fe2599 259.940 {129} ppb .0247 .0793 321.4
#1 #2	<.	0264 0000	.0883 .0499	< .0000 2.916	1.724 .5286	.0808 <.0000
Elem Line Units Avg Stddev %RSD	Ge 206_866 { 2 4	2068 162} 2 ppm 6000 .888 81.2	In2306 230.606 {146} ppb .3824 .4225 110.5	K_7664 766.490 { 44) ppb <.0000 .3923 9.373	Li6103 610.362 { 55} ppb 4.112 .293 7.127	Mg3838 383.826 { 87} ppb .9620 1.556 161.8
#1 #2	< . 2	0000	.0837 .6812	<.0000 <.0000	4.319 3.904	2.062 < .0000
Elem Line Units Avg Stddev %RSD	Mn 257.610 { <. 1	2576 131} 2 ppb 0000 0014 .494	Mo2020 202.030 {166} ppb 1.306 .128 9.800	Na5889 588.995 { 57} ppb <.0000 .2653 4.675	Na5895 589.592 { 57} ppb <.0000 .2060 1.159	Ni2316 231.604 {145} ppb .2242 .0182 8.105
#1 #2	<. <.	0000 0000	1.216 1.397	<.0000 <.0000	<.0000 <.0000	.2371 .2114
Elem Line Units Avg Stddev %RSD	Os 225.585 { <. 1 1	2255 149} 2 ppB 0000 .317 88.6	Pb2203 220.353 [152] ppb <.0000 .2631 12.91	Pd3242 324.270 {103} ppb <.0000 164.5 15.72	Pt2036 203.646 [164] ppb <.0000 10.70 44.66	Pt2144 214.423 {156} ppb <.0000 .2788 32.64
#1 #2	< .	2331 0000	<.0000 <.0000	< .0000 < .0000	< .0000 < .0000	<.0000 <.0000

Sample Name: ICB-1 Run Time: 07/18/07 11:40

Elem	Ru2402	Sb2068	Sel960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 [171]	288.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	.2928	3.238	<.0000	2.978	.2626
Stddev	.6332	.674	1.483	.002	.0479
≩RSD	216.2	20.80	199.6	.0495	18.25
51	<.0000	3.714	< .0000	2.977	.2965
52	.7405	2.762	.3058	2.979	.2287
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	1.078	2.625	.4023	<.0000	<.0000
Stddev	.133	3.669	.5988	.6725	.5808
ARSD	12.30	139.7	148.8	88.91	48.31
#1	1.172	5.220	.8257	<.0000	<.0000
#2	.9840	.0312	<.0000	<.0000	<.0000
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 (115)	239.709 (140)	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	<.0000	.3769	<.0000	1.028	
Stddev	.9564	.9853	.0077	.208	
%RSD	35.34	261.4	3.123	20.20	
₩1	<.0000	<.0000	<.0000	.8815	
#2	<.0000	1.074	<.0000	1.175	

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1ethod: Si	PEX Sample Nam	e: CRI-1	Operat	or:	
Comment: Run Time:	07/18/07 11:45 Typ	e: Unk Mode:	CONC Corr.	Fact: 1.000000	
llem	Ag328	0 Al3082	Al3961	As1937	Au2427
Line	328.068 {102	} 308.215 {109}	396.152 { 85}	193.759 (173)	242.795 {138}
Jnits	pp	b ppb	ppm	ppb	ppb
Avg	19.9	1 36.11	1.521	20.45	<.0000
Stddev	1.0	2 23.89	.091	1.29	.3134
&RSD	5.14	6 66.18	5.973	6.287	22.50
⊪1.	20.6	3 53.00	1.457	19.54	<.0000
⊮2	19.1	8 19.21	1.585	21.36	<.0000
Elem	B_249	6 Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135	493.409 { 68 }	313.042 {107}	190.241 {176}	317.933 {105}
Jnits	pr	b ppb	ppb	ppm	ppb
Avg	1.07	6 .1140	9.714	<.0000	3.251
Stdde⊽	.28	1 .0810	.056	.1866	.612
≹RSD	26.1	3 71.06	.5733	14.51	18.83
降1	1.27	4 .0567	9.753	<.0000	3.684
#2	.876	8 .1712	9.674	<.0000	2.818
Elem	Cd228	8 Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147	} 228.616 {147}	357.869 { 94}	324.754 (103)	259.940 {129}
Jnits	pr	b ppb	ppb	ppb	ppb
Avg	9.93	8 99.38	19.59	50.28	1.040
Stddev	.04	5 .14	1.82	1.82	.034
&RSD	.454	5 .1380	9.310	3.622	3.262
#1	9.90	6 99.28	20.88	51.57	1.016
#2	9.97	0 99.47	18.30	48.99	1.064
Elem	Ge206	8     In2306       230.606 {146}       m     ppb       3     .7530       1     1.048       .0     139.2	K_7664	Li6103	Mg3838
Line	206.866 {162		766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	pr		ppb	ppb	ppb
Avg	2.12		<.0000	1.791	3.026
Stddev	.51		.0032	.048	7.584
&RSD	24.1		.0781	2.664	250.6
<b>#</b> 1	2.48	4 1.494	<.0000	1.757	< .0000
#2	1.76	1 .0119	<.0000	1.824	8.389
Elem	Mn257	6 Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131	3 202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 (145)
Units	pr	b ppb	ppb	ppb	ppb
Avg	29.4	5 .9358	5.007	<.0000	82.95
Stddev	.0	5 .0311	.587	.2985	.02
&RSD	.169	0 3.328	11.72	6.784	.0216
₩1	29.4	2 .9578	5.422	<.0000	82.96
#2	29.4	9 .9130	4.592	<.0000	82.93
Elem	Os225	5 Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Units	PP	B ppb	ppb	ppb	ppb
Avg	<.000	0 5.378	<.0000	1.261	<.0000
Stddev	1.43	7 .039	738.7	.002	2.230
%RSD	454	2 .7226	423.6	.1275	70.71
#1	< .000	0 5.350	< .0000	1.262	<pre>&lt; .0000</pre>
#2	.699	8 5.405	347.9	1.260	< .0000

# Sample Name: CRI-1 Run Time: 07/18/07 11:45

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 (116)	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	.4940	96.85	10.23	1.487	.4828
Stddev	.6339	2.97	.43	6.287	.1199
&RSD	128.3	3.070	4.243	422.8	24.83
#1	.9422	94.75	10.53	5.933	.5676
#2	.0457	98.95	9.921	< .0000	.3981
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	1.547	<.0000	<.0000	<.0000	20.18
Stddev	2.254	1.121	.7802	.5807	.54
≹RSD	145.7	94.16	5.271	103.3	2.681
#1	< .0000	<pre>&lt; .0000</pre>	<.0000	<.0000	20.56
#2	3.140	< .0000	<.0000	<.0000	19.80
Elem	V_2924	₩_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	92.77	<.0000	40.78	<.0000	
Stddev	1.78	.8654	.04	1.069	
&RSD	1.924	1.912	.0860	847.6	
#1	91.51	<.0000	40.76	.6299	
≇2	94.03	<.0000	40.81	< .0000	

Analysis Report

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Method: SI	PEX S	Sample Na	ame:	ICSA-1		c	perato	or:			
Run Time:	07/18/07	11:50 Ty	ype:	Unk	Mode:	CONC	Corr.H	Tact: 1.0	00000		
Elem Line Jnits Avg Stddev &RSD	328	Ag32 3.068 {10 	280 02} 0pb 000 582 412	م 308.215 44	13082 {109} ppb 9500. 1100. .2446	Al 396.152 ( 367 1	23961 85} ppm 7300. 035. 2817	A 193.759 <	s1937 {173} ppb .0000 1.338 4.185	242.795	Au2427 {138} ppb <.0000 1.938 .7671
#1 #2		<.00 <.00	000	4 4 4 5	18800. 30300.	366 368	5600. 3100.	< <	.0000 .0000	<	.0000 .0000
Elem Line Units Avg Stddev &RSD	249	B_24 9.678 {13 (.00 (1.9 .53	496 35} opb 000 920 337	E 493.409	3a4934 { 68} ppb 1.185 .041 3.422	Be 313.042 ( - - 3	3130 [107] ppb 0006 0205 3603.	B 190.241	i1902 {176} ppm 30.06 4.52 15.03	317.933 3	Ca3179 {105} ppb 48800. 168. .0482
#1 #2		< .00 < .00	000		1.214 1.156	<.	0150		33.26 26.87	3 3	48700. 48900.
Elem Line Units Avg Stddev %RSD	228	Cd22 3.802 (14 F <.00 .01 .73	288 47} 5pb 500 134 395	0 228.616 <	Co2286 (147) ppb (.0000 .0352 3.853	Cr 357.869 { <. 3 1	3578 94} ppb 0000 3.316 4.65	C 324.754 <	u3247 {103} ppb .0000 .3506 1.365	259.940 1	Fe2599 {129) ppb 17800. 867. .7358
#1 #2		<.00 <.00	000	<	<.0000 <.0000	< . < .	0000	<	.0000	1 1	17200. 18400.
Elem Line Onits Avg Stddev &RSD	206	Ge20 5.866 {16 18. 2. 13.	068 62} .18 .38 .10	1 230.606 <	[n2306 {146} ppb <.0000 1.472 8.964	K 766.490 { <. 2	7664 44} ppb 0000 6746 2.685	L 610.362 <	i6103 { 55} ppb .0000 .0290 .0084	383.826 4	Mg3838 [ 87] ppb 25200. 656. .1543
#1 #2		16. 19.	.50 .86	< <	.0000 .0000	<. <.	0000	< <	.0000	4. 4.	25700. 24700.
Elem Line Units Avg Stddev %RSD	257	Mn25 7.610 {13 F <.00 .04 2.1	576 31} 5pb 500 486 182	202.030 <	102020 {166} ppb .0000 .2598 10.40	Na 588.995 { 2	5889 57) ppb 5.56 .18 7029	N 589.592	a5895 (57) ppb 13.40 .53 3.977	231.604	Ni2316 {145} ppb <.0000 .1379 .9311
#1 #2		<.00 <.00	000	<	.0000 .0000	2	5.44 5.69		13.03 13.78		<.0000 <.0000
Elem Line Units Avg Stdde <del>v</del> &RSD	225	Os22 5.585 {14 231 1 .63	255 49} ppB 17. 15. 374	220.353	2b2203 {152} ppb .0000 .5104 .4893	Pd 324.270 { 4 1 2	13242 103} ppb 184. 151. 7.51	P 203.646	t2036 {164} ppb 1887. 9. .4622	214.423	Pt2144 {156} ppb <.0000 1.656 1.132
#1 #2		230 232	07. 27.	<	.0000 .0000	4 3	998. 370.		1893. 1881.	< <	.0000

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Sample Name: ICSA-1 Run Time: 07/18/07 11:50

Elem	Ru2402	Sb2068	Se1960	Si2081	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	16.03	<.0000	<.0000	2.236
Stddev	8.205	3.13	.3113	8.402	.539
&RSD	2.862	19.56	1.329	285.4	24.12
#1	< .0000	18.24	<.0000	< .0000	1.855
#2	< .0000	13.81	<.0000	2.997	2.618
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 (140)	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	· ppb	ppb
Avg	7.550	839.1	<.0000	<.0000	<.0000
Stddev	.265	7.1	.0296	1.007	.4574
%RSD	3.505	.8491	4.113	3.918	4.999
#1	7.363	844.2	<.0000	<pre>&lt; .0000 &lt; .0000</pre>	<.0000
#2	7.737	834.1	<.0000		<.0000
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99]	
Units	ppb	ppb	ppb	ppb	
Avg	6.090	127.8	3.801	4.116	
Stddev	.958	.0	.142	.357	
&RSD	15.73	.0105	3.735	8.668	
#1	6.767	127.8	3.901	4.368	
#2	5.413	127.8	3.701	3.864	

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Sample Name: ICSA-1 Run Time: 07/18/07 11:50

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 (140)	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	16.03	<.0000	<.0000	2.236
Stddev	8.205	3.13	.3113	8.402	.539
%RSD	2.862	19.56	1.329	285.4	24.12
#1	< .0000	18.24	<.0000	< .0000	1.855
#2	< .0000	13.81	<.0000	2.997	2.618
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 (100)	190.864 (176)
Units	ppb	ppb	ppm	- ppb	ppb
Avg	7.550	839.1	<.0000	<.0000	<.0000
Stddev	.265	7.1	.0296	1.007	.4574
%RSD	3.505	.8491	4.113	3.918	4.999
#1	7.363	844.2	<.0000	< .0000	<.0000
#2	7.737	834.1	<.0000	< .0000	<.0000
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 ( 99)	
Units	ppb	ppb	ppb	ppb	
Avg	6.090	127.8	3.801	4.116	
Stddev	.958	.0	.142	.357	
%RSD	15.73	.0105	3.735	8.668	
#1	6.767	127.8	3.901	4.368	
#2	5.413	127.8	3.701	3.864	

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Method: S	PEX Sample Name:	ICSAB-1	Operat	cor:	
Run Time:	07/18/07 12:02 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Elem	Ag3280	Al3082	Al3961	As1937	Au2427
Line	328.068 {102}	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 {138}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	906.3	440800.	367300.	<.0000	<.0000
Stddev	5.3	1878.	1859.	.4208	.6322
&RSD	.5818	.4261	.5063	1.103	.2381
#1	902.6	439500.	368600.	<.0000	<.0000
#2	910.0	442100.	366000.	<.0000	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 (176)	317.933 {105}
Units	ppb	ppb	ppb	ppm	ppb
Avg	<.0000	477.2	449.8	31.81	348900.
Stddev	.0782	.7	.9	.37	631.
%RSD	.0213	.1433	.1950	1.173	.1808
#1	<.0000	<b>476</b> .7	449.2	32.07	348400.
#2	<.0000	<b>477</b> .7	450.4	31.54	349300.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 (147)	357.869 { 94}	324.754 {103}	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	967.1	418.8	458.2	420.7	117900.
Stddev	3.0	.9	.7	.5	268.
%RSD	.3129	.2039	.1588	.1142	.2269
#1	965.0	418.2	457.7	421.1	117700.
#2	969.3	419.4	458.7	420.4	118100.
Elem	Ge2068	In2306	K 7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	15.53	<.0000	<.0000	<.0000	419600.
Stddev	.79	1.301	.7382	3.639	685.
%RSD	5.106	7.879	3.625	1.033	.1633
#1	16.10	<pre>&lt; .0000. &gt; &lt; .0000.</pre>	<.0000	<pre>&lt; .0000</pre>	420100.
#2	14.97		<.0000	< .0000	419100.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 (166)	588.995 { 57}	589.592 { 57}	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	477.1	1.358	37.07	26.18	806.1
Stddev	.6	.093	.23	.18	2.3
%RSD	.1213	6.856	.6263	.6738	.2854
#1	476.7	1.424	37.24	26.06	804.5
#2	477.5	1.292	36.91	26.31	807.7
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	2420.	1002.	5638.	2107.	<.0000
Stddev	5.	2.	1727.	44.	2.848
%RSD	.1937	.1968	30.63	2.087	.4895
#⊥	2417.	1000.	6859.	2076.	<pre>&lt; .0000 &lt; .0000</pre>
#2	2423.	1003.	4417.	2138.	

Sample Name: ICSAB-1 Run Time: 07/18/07 12:02

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Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 [140]	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	20.98	<.0000	<.0000	2.592
Stddev	.1060	3.56	.6490	2.101	.036
&RSD	.0367	16.97	2.654	6.153	1.387
#1	<.0000	23.50	<.0000	<pre>&lt; .0000</pre>	2.566
#2	<.0000	18.46	<.0000	< .0000	2.617
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	5.486	867.8	<.0000	<.0000	<.0000
Stddev	1.592	5.3	1.677	.1203	1.908
łRSD	29.02	.6116	2.555	.4505	12.35
#1	6.612	864.0	< .0000	<.0000	< .0000
#2	4.361	871.5	< .0000	<.0000	< .0000
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 [140]	213.856 {157}	339.198 { 99}	
Jnits	ppb	ppb	ppb	ppb	
Avg	439.0	<.0000	916.4	4.767	
Stddev	2.2	.0810	2.5	.029	
&RSD	.5010	.4049	.2722	.6179	
₩1	437.5	<.0000	914.6	4.746	
₩2	440.6	<.0000	918.2	4.788	

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Method: SPEX Sample Name:				CCV-1	IV-1 Operator:					
Run Time:	07/18/07	12:07	Type:	Unk	Mode:	CONC	Corr.	Fact: 1.00000	o	
Elem Line Units Avg Stddev %RSD	3	A 28.068	g3280 {102} ppb 491.9 2.3 .4750	308.215	A13082 {109} ppb 2093. 3. .1574	; 396.152	Al3961 { 85} ppm 2048. 1. .0293	As193 193.759 {173 pp 2035 13 .618	7 Au2427 242.795 (138) 5 ppb . <.0000 4957 3 .8090	
#1 #2			490.2 493.5		2091. 2096.		2048. 2047.	2026 2044	<.0000 <.0000	
Elem Line Onits Avg Stddev &RSD	2	B 49.678	2496 {135} ppb 1922. 9. .4481	493.409	Ba4934 { 68} ppb 2094. 1. .0705	1 313.042	Be3130 {107} ppb 2071. 5. .2508	Bi1902 190.241 {176 ppr <.0000 1.492 46.65	2 Ca3179 317.933 {105} ppb 2010. 2 5. 5 .2690	
#⊥ #2		:	1916. 1929.		2093. 2095.		2075. 2067.	< .0000 < .0000	2014. 2006.	
Elem Line Units Avg Stddev %RSD	2:	Ca 28.802 - 2	H2288 (147) ppb 2116. 6. 3012	228.616	Co2286 {147} ppb 2055. 6. .3034	0 357.869	Cr3578 { 94) ppb 1971. 3. .1600	Cu3247 324.754 {103} ppb 2005. 4. .2169	Fe2599 259.940 (129) ppb 2143. 21. 9 .9803	
#1 #2		2	2111. 2120.		2051. 2060.		1974. 1969.	2008. 2002.	2158. 2128.	
Elem Line Units Avg Stddev %RSD	20	Ge 06.866 { 2. 4	≥2068 {162} ppm .0000 3.171 48.88	230.606	In2306 {146} ppb <.0000 .1859 64.83	F 766.490	<pre>&lt; 7664 { 44} ppb 9865. 60587</pre>	Li6103 610.362 { 55} ppt 1934. 2. .1208	Mg3838 383.826 { 87} ppb 2037. 1. .0306	
#1 #2		< . < .	0000	۰ ۲	<.0000 <.0000		9869. 9861.	1936. 1933.	2036. 2037.	
Elem Line Units Avg Stddev %RSD	25	Mr 57.610 { 1	2576 131) ppb 999. 7. 3298	1 202.030	fo2020 {166} ppb 2088. 46. 2.205	N 588.995	Ia5889 { 57} ppb 2197. 3. .1494	Na5895 589.592 { 57} ppb 2032. .0017	Ni2316 231.604 {145} ppb 2115. 8. .3722	
₩1 ₩2		1 2	.994. 2003.		2056. 2121.		2194. 2199.	2032. 2032.	2109. 2120.	
Elem Line Units Avg Stddev %RSD	22	0⊴ 25.585 { 1 8	2255 149} ppB 1.80 1.06 2.975	1 220.353	2b2203 {152} ppb 2150. 6. .2725	P 324.270	d3242 {103} ppb 5229. 985. 18.83	Pt2036 203.646 {164} ppb 417.3 19.0 4.557	Pt2144 214.423 {156} ppb <.0000 22.88 2.051	
₩1 #2		1	2.55		2146. 2154.		4533. 5926.	430.8 403.9	<pre>&lt; .0000 &lt; .0000</pre>	

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Sample Name: CCV-1 Run Time: 07/18/07 12:07

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	208.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	1970.	2040.	3954.	2002.
Stddev	.2604	71.	19.	2.	9.
%RSD	6.528	3.614	.9385	.0503	.4473
告1	<.0000	1920.	2027.	3953.	1995.
#2	<.0000	2021.	2054.	3955.	2000.
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 (140)	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	2044.	17.86	<.0000	<.0000	2147.
Stddev	2.	3.88	.2988	.0609	8.
&RSD	.0808	21.76	.4211	5.119	.3505
#1	2042.	15.11	<.0000	<.0000	2142.
#2	2045.	20.60	<.0000	<.0000	2153.
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 [140}	213.856 [157]	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	2116.	<.0000	2082.	<.0000	
Stddev	12.	.8334	7.	.2658	
%RSD	.5775	.5427	.3219	23.88	
#1	2108.	<.0000	2077.	<.0000	
#2	2125.	<.0000	2086.	<.0000	

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Method: Si	PEX Sample Name	: CCB-1	Opera	tor:	
Run Time:	07/18/07 12:11 Type	: Unk Mode:	CONC Corr	.Fact: 1.000000	
Elem Line Units	Ag3280 328.068 (102)	A13082 308.215 {109]	Al3961 396.152 { 85}	As1937 193.759 (173)	Au2427 242.795 {138}
Avg	<.0000	17.86	ppm <.0000	aqq 0000.>	ppb <.0000
Stadev %RSD	.4851 226.2	8.37 46.85	2.330 408.1	.1054 51.62	.3906 167.3
#1 #2	<.0000	11.94	< .0000	<.0000	<.0000
# Z	.1200	23.77	1.077	<.0000	.0427
Elem Line	<u>B_2496</u> 249.678 {135}	Ba4934 493.409 { 68}	Be3130 313.042 {107}	Bi1902 190.241 (176)	Ca3179 317 933 (105)
Units	dqq	ppb	ppb	נסיבן) בובוסיב תקק	daa
Avg	<.0000	.0331	<.0000	. 9889	3.974
Stddev	.0263	-0609	.0392	2.471	3.883
&RSD	19.56	184.4	1537.	249.8	97.72
#1	<.0000	<.0000	.0251	2.736	6.719
₩Z	<.0000	.0761	<.0000	< .0000	1.228
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Diffe	220.002 (147)	220.010 (147)	357.869 { 94]	324.754 (103)	259.940 (129)
Ava	2000 >	1122	ppb	ppb	ppb
Stddev	1330	1/70	1.03/	- 4925	12.52
BRSD	227.0	131.7	2.170	.8435	5.37
# 7	< 0000	0.077		111.0	42.09
#⊥ ≞⊃	<_0000	.0077	3.076	<.0000	16.32
		.2100	< .0000	1.089	8.723
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Juite	200.886 [182]	230.000 (140)	/06.490 { 44}	610.362 { 55}	383.826 { 87}
ANG	2 404	aqq >	ppb	ppb	ppb
Stddev	452	<.0000 0127	<.0000	2.566	.1364
%RSD	18.82	694.6	4.572	2.131	4.669
# 1	0 700	< 0000		05.00	3422.
*⊥ #2	2.084	.5140	<.0000	4.073	< .0000
	N 0576			1.000	2.420
Slem	MD2576	MO2U2U	Na5889	Na5895	Ni2316
Joito	257.010 (131)	202.030 (166)	588.995 { 57}	589.592 { 57}	231.604 {145}
Ava	add 2000 ->	5500	ppb	ppb	dqq
stddev	0261	. 3399	<.0000	<.0000	.0700
1RSD	35 92	19 72	.1200	.2735	.1071
	55.52	10.72	1.776	1.555	153.0
#1	<.0000	.4858	<.0000	<.0000	<.0000
#2	<.0000	.6340	<.0000	<.0000	.1457
Elem	0s2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 (149)	220.353 [152]	324.270 {103}	203.646 (164)	214.423 {156]
Jnits	PPB	ppb	ppb	ppb	daa
łvg	<.0000	<.0000	58.02	<.0000	. 0659
stddev	1.036	.3684	574.4	1.189	2.199
ŧRSD	345.1	30.70	989.9	6.578	3338.
¥1	. 4324	<.0000	464.2	< .0000	< .0000
<b>₽</b> 2	< .0000	<.0000	< .0000	< .0000	1 621

Sample Name: CCB-1 Run Time: 07/18/07 12:11

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Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171)	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	.1383	1.170	.6776	13.37	<.0000
Stddev	.1538	.058	.0926	6.28	.0479
%RSD	111.2	4.943	13.67	47.00	568.0
#1	.2470	1.129	.7431	8.924	.0254
#2	.0295	1.211	.6121	17.81	<.0000
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	<.0000	1.800	.3387	<.0000	<.0000
Stddev	1.590	4.663	1.168	.3362	.5808
%RSD	147.5	259.0	344.8	51.85	73.34
#1	.0464	5.098	< .0000	<.0000	<.0000
#2	< .0000	< .0000	1.164	<.0000	<.0000
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Jnits	ppb	ppb	ppb	ppb	
Avg	<.0000	<.0000	<.0000	.7765	
Stddev	3.666	1.090	.0492	.3861	
%RSD	650.6	402.9	20.31	49.73	
#1	2.029	.5001	<.0000	.5035	
#2	< .0000	< .0000	<.0000	1.050	

fethod: Si	PEX Sample	Name:	CCV-2	Operat	lor:	
Run Time:	07/18/07 14:03	Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Elem Line Jnits Avg Stddev ARSD	A 328.068	g3280 {102} ppb 489.9 .2 .0458	Al3082 308.215 {109} ppb 2170. 15. .6904	Al3961 396.152 { 85} ppm 2085. 10. .4897	As1937 193.759 (173) ppb 2024. 8. .3920	Au2427 242.795 (138) ppb <.0000 .8255 5.979
₩1 ¥2		489.8 490.1	2181. 2160.	2093. 2078.	2019. 2030.	<.0000 <.0000
Elem Line Jnits Avg Stddev &RSD	в 249.678	_2496 (135) ppb 1916. 7. .3887	Ba4934 493.409 { 68} ppb 2063. 3. .1620	Be3130 313.042 {107} ppb 2055. 1. .0277	Bi1902 190.241 {176] ppm .8897 .8389 94.29	Ca3179 317.933 {105} ppb 2048. 7. .3582
⊭1 ⊭2		1911. 1921.	2065. 2060.	2055. 2055.	.2965 1.483	2053. 2043.
Elem Line Jnits Avg Stddev &RSD	C 228.802	d2288 {147} ppb 2119. 9. .4272	Co2286 228.616 {147} ppb 2068. 5. .2215	Cr3570 357.869 { 94} ppb 1991. 7. .3720	Cu3247 324.754 {103} ppb 2008. 9. .4497	Fe2599 259.940 {129} ppb 2107. 3. .1409
⊭1 ⊮2		2112. 2125.	2065. 2071.	1997. 1986.	2015. 2002.	2109. 2105.
Elem Line Jnits Avg Stddev łRSD	G 206.866 <	e2068 {162} .0000 .5095 2.581	In2306 230.606 {146} ppb <.0000 .5239 27.06	K_7664 766.490 { 44} ppb 9776. 17. .1742	Li6103 610.362 { 55} ppb 2046. 10. .4901	Mg3838 383.826 { 87] ppb 2034. 5. .2430
₩1 ₩2	<	.0000 .0000	<.0000 <.0000	9788. 9764.	2053. 2039.	2037. 2030.
Elem Line Jnits Avg Stddev &RSD	мл 257.610 :	n2576 {131} ppb 2015. 4. 2069	Mo2020 202.030 {166} ppb 2042. 45. 2.214	Na5889 588.995 { 57} ppb 1846. 2. .1236	Na5895 589.592 { 57) ppb 2052. 2. .0922	Ni2316 231.604 {145} ppb 2121. 4. .1853
₿1 ₿2		2012. 2018.	2010. 2074.	1847. 1844.	2053. 2051.	2119. 2124.
Elem Line Jnits Avg Stddev &RSD	04 225.585 2	2255 [149] ppB 30.34 .68 2.250	Pb2203 220.353 {152} ppb 2187. 6. .2863	Pd3242 324.270 {103} ppb 2556. 493. 19.30	Pt2036 203.646 {164} ppb 366.5 18.4 5.029	Pt2144 214.423 {156} ppb <.0000 45.84 2.614
₿1 ₿2	2	30.82 29.85	2183. 2192.	2905. 2208.	379.5 353.4	< .0000

nple	Name:	CCV-2	Run	Time:	07/18/07	14:03
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em	Ru2402	Sb2068	Se1960	Si2881	Sn1899
ne	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
its	ppb	ppb	ppb	ppb	ppb
g	<.0000	1979.	2026.	4083.	2036.
ddev	.0000	64.	12.	4.	6.
SD	.0006	3.212	.5810	.0992	.2850
	<.0000	193 <b>4</b> .	2018.	4080.	2032.
	<.0000	2024.	2035.	4086.	2040.
em	Sr3464	Ta2400	Te2142	Ti3361	T11908
ne	346.446 { 97}	240.063 (140)	214.281 {157}	336.121 {100}	190.864 {176}
its	ppb	ppb	ppm	ppb	ppb
g	2063.	24.14	<.0000	<.0000	2167.
ddev	10.	2.07	4.038	.1834	7.
.SD	.4891	8.581	1.336	6.476	.3373
	2070.	22.68	< .0000	<.0000	2162.
	2056.	25.61	< .0000	<.0000	2172.
.em .ne 1its 'g :dde⊽ &SD	V 2924 292.402 {115} ppb 2021. .0116	₩_2397 239.709 {140} ppb <.0000 10.88 1.178	Zn2138 213.856 {157} ppb 2062. 2. .0920	Zr3391 339.198 { 99} ppb .9862 .0297 3.014	
2	2021. 2020.	<pre>&lt; .0000 &lt; .0000</pre>	2061. 2064.	.9652 1.007	
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Method: SI	PEX Samp	le Name:	CCB-2			Operat	or:	
Run Time:	07/18/07 14:	05 Type:	Unk	Mode:	CONC	Corr.	Fact: 1.000000	
Elem Line Units Avg Stddev %RSD	328.06	Ag3280 8 {102} ppb 1.759 .850 48.29	308.215	A13082 (109) ppb 17.87 16.18 90.55	A 396.152 <	13961 { 85} ppm .0000 1.972 115.2	As1937 193.759 {173} ppb .9484 .2633 27.76	Au2427 242.795 {138} ppb <.0000 .4016 859.6
#1 #2		1.158 2.360		29.30 6.426	< <	.0000	1.135 .7623	.2373 <.0000
Elem Line Onits Avg Stddev %RSD	249.67	B_2496 8 {135} ppb .4551 .5617 123.4	493.409	Ba4934 { 68} ppb .0376 .0170 45.15	B 313.042	e3130 {107} ppb .0224 .0185 82.96	Bi1902 190.241 {176} ppm .1319 .1398 106.0	Ca3179 317.933 (105} ppb .2890 1.124 388.9
#1 #2		.0523 .0579		.0256 .0496		.0092 .0355	.0331 .2307	1.084 < .0000
Elem Line Jnits Avg Stddev &RSD	228.802	Cd2288 2 [147] ppb <.0000 .0527 64.02	( 228.616	Co2286 (147) ppb .0384 .0705 183.8	C 357.869 <	r3578 { 94} ppb .0000 2.290 83.20	Cu3247 324.754 {103} ppb 1.442 .199 13.80	Fe2599 259.940 {129} ppb .4005 .0784 19.57
#1 #2		<.0000 <.0000	•	<.0000 .0883	< <	.0000	1.301 1.583	.3451 .4559
Elem Line Jnits Avg Stddev HRSD	206.866	Ge2068 5 {162} ppm 1.402 1.417 101.0	230.606	[n2306 {146} ppb .3227 .2704 83.78	к 766.490 <	_7664 { 44} ppb .0000 1.100 26.49	Li6103 610.362 { 55} ppb <.0000 1.820 167.0	Mg3838 383.826 { 87} ppb <.0000 1.945 108.8
₿1 ₿2		2.404 .4005		.1315 .5139	< . < .	.0000	< .0000 .1972	< .0000 < .0000
Elem Line Jnits Avg Stddev &RSD	257.610	Mn2576 {131} ppb <.0000 .0303 30.57	₽ 202.030	io2020 {166} ppb 1.035 .202 19.50	Na 588.995 { <. 1 1	a5889 [57] ppb .0000 [.391 [2.09	Na5895 589.592 { 57} ppb <.0000 .0795 .3846	Ni2316 231.604 {145} ppb .1557 .0141 9.083
₩1 ¥2		<.0000 <.0000		.8920 1.177	< . < .	0000	<.0000 <.0000	.1457
Elem Line Jnits Avg Stddev ARSD	225.585	Os2255 {149} ppB <.0000 1.529 166.9	۹ 220.353 <	b2203 {152} ppb .0000 .3421 31.97	Pc 324.270 { <. 4 2	13242 (103) ppb 0000 (519. 210.2	Pt2036 203.646 {164} ppb <.0000 4.161 98.99	Pt2144 214.423 {156} ppb .0001 .3716 366000.
⊧1 ⊧2	<	.1653 .0000	<	.0000	< 1	.000	< .0000	<.0000

Sample Name: CCB-2 Run Time: 07/18/07 14:05

Elem	Ru2402	Sb206B	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	.2555	3.429	1.399	19.31	.2711
Stddev	.1892	.481	1.916	18.90	.0599
&RSD	74.06	14.04	137.0	97.89	22.11
#1	.1217	3.769	.0439	5.943	-3135
#2	.3892	3.089	2.754	32.67	.2287
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	.3279	2.228	<.0000	<.0000	<.0000
Stddev	.1325	4.317	.5991	.0306	.4145
%RSD	40.42	193.7	166.4	23.57	16.63
#1	.2342	5.280	<.0000	<.0000	<.0000
#2	.4216	< .0000	.0636	<.0000	<.0000
Elem	V_2924	₩_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 (157)	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	<.0000	<.0000	<.0000	.3358	
Stddev	.9564	.4984	.0382	.1187	
%RSD	60.58	112.6	18.88	35.35	
#1	<.0000	<.0000	<.0000	.2519	
#2	<.0000	<.0000	<.0000	.4197	

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Method: Si	PEX	Sample	Name:	MBLK, IW			Operat	tor:			
Run Time:	07/18/07	14:47	Type:	Ünk	Mode:	CONC	Corr	Fact: 1	. 000000		
Elem Line Units	32	Ac 8.068	3280 [102]	2 308.215	13082 [109]	396.15	Al3961 2 { 85}	193.759	As1937 9 {173]	Au 242.795 {	2427
Avg Stddev		<.	.0000		9.182		1.902 807		1.933 236	<.	0000
&RSD		]	106.1		70.56		42.43		12.23	- 4	9.09
#1 #2		<. <.	0000		4.601 13.76		1.331 2.472		1.766 2.100	<. <.	0000
Elem		B_	2496	E	Ba4934		Be3130		Bi1902	Ca	3179
Line	24	9.678 {	[135]	493.409	{ 68 }	313.04	2 {107}	190.241	L {176}	317.933 {	105}
Units			ррь 1137		2257		ppb		ppm	-	ppb
Stddev		•	1492		.0075		00000		3.360	ک	. 323
%RSD		3	31.2		3.316		521.9		22.26	2	1 52
41		-	2102		2204		0170		22.20	2	1.52
#1 #2			0082		.2310		<.0000		4.120	23	.81/ .829
Elem	0.01	Co	12288	000 616	02286		Cr3578		Cu3247	Fe	2599
Line	22	8.802 {	14/]	228.616	(147)	357.869	9 { 94 ]	324.754	{103}	259.940 {	129}
ANG		<	aqq		ppp 0911				ppb	~	ppb
Stddev			065B		.0095		1 374		1 541	Ь	125
%RSD		1	46.3		10.41		282.8		121.7	2	.019
#1 * 2			0016		-0844		< .0000		2.357	6	.260
₩2		<.	0000		.0978		.4859		.1770	6	.084
Elem	20	Ge	2068	220 COC	n2306	766 400	K_7664	<i></i>	Li6103	Mg	3838
Line	201	0.000 {	102}	230.606	{140}	/66.490	) { 44}	610.362	[ 55]	383.826 {	87}
Ava			9199 9199		3584		qqq >		1457	-	ppb
Stddev		2	.435		.1522		.0320		. 4250	1	- 920 751
8RSD		2	64.7		42.46		1.192		291.7	90	0.96
#1		2	.642		.4660		<.0000		.4462	3	.162
#2		< .	0000		.2508		<.0000		<.0000	. (	5868
Elem	257		2576	M	02020	F00 000	Na5889		Na5895	Ni	2316
Units	231	. OTO (	1913	202.030	{100}	588.995	) ( 57) DDb	589.592	(57)	231.604 {:	145)
Ava		<.	0000		.6641		25 58		20 91	,	ppb
Stddev			0061		.1203		2.14		2.94	. (	1200
€RSD		1	6.54		18.11		8.350		14.05	32	22.9
#1		<.	0000		.5790		27.09		22.99	<.(	0000
#2		<.	0000		.7491		24.07		18.84	. (	)657
Elem		Os	2255	P.	Ь2203		Pd3242		Pt2036	Pt2	2144
Line	225	0.585 (	149}	220.353	{152}	324.270	{103}	203.646	(164)	214.423 []	156)
Ava		1	0000 pps		aqq		ppb		ppb	-	ppb
Stddev		· · ·	3768		.8420		164 2		10 10	1.	518
&RSD		8	7.29		67.04		70.51		30.82	18	341
#1		<.	0000	<	.0000	<	.0000	<	.0000	2	059
#2		<.	0000	<	.0000	<	.0000	<	.0000	2.	577

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Sample Name: MBLK, IW Run Time: 07/18/07 14:47

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Elem	Ru2402	Sb2068	Sel960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 (176)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.2132	3.660	1.486	7.434	.5251
Stddev	.2842	.539	.618	2.098	.3234
&RSD	133.3	14.72	41.59	28.22	61.58
#1	.4142	4.041	1.049	8.917	.2964
#2	.0122	3.279	1.923	5.950	.7538
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 (140)	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	2.109	3.999	<.0000	.0650	7.362
Stddev	.530	.518	1.228	.3668	1.742
%RSD	25.14	12.96	725.1	564.4	23.67
#1	2.484	3.633	.6987	.3243	8.593
#2	1.734	4.366	< .0000	<.0000	6.130
Elem	V_2924	¥ 2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	1.578	<.0000	<.0000	.8185	
Stddev	.319	.5216	.0291	.2672	
&RSD	20.21	77.58	19.67	32.65	
#1	1.352	<.0000	<.0000	1.007	
#2	1.803	<.0000	<.0000	.6295	

Method: SI Comment:	PEX Sample	Name:	LCS-W, IW	Operat	tor:	
Run Time:	07/18/07 14:52	? Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Elem Line Units Avg Stddev %RSD	2 328.068	Ag3280 {102} ppb 481.7 .0 .0006	Al3082 308.215 (109) ppb 2173. 1. .0589	Al3961 396.152 { 85} ppm 2109. 4. .1780	As1937 193.759 {173} ppb 2041. 3. .1607	Au2427 242.795 {138} ppb <.0000 .3960 2.785
<b>∜1</b> #2		401.7 401.7	2172. 2174.	2106. 2112.	2039. 2043.	<.0000 <.0000
Elem Line Units Avg Stddev &RSD	E 249.678	2496 {135} ppb 1907. 6. .2917	Ba4934 493.409 { 68} ppb 2029. 4. .2139	Be3130 313.042 {107} ppb 2068. 1. .0441	Bi1902 190.241 {176} ppm 2.373 1.445 60.90	Ca3179 317.933 {105} ppb 2067. 1. .0538
₩1 ₩2		1903. 1911.	2026. 2032.	2069. 2068.	1.351 3.395	2067. 2068.
Elem Line Jnits Avg Stddev &RSD	C 228.802	d2288 {147} ppb 2114. 2. .1110	Co2286 228.616 {147} ppb 2087. 4. .1819	Cr3578 357.869 { 94] ppb 1987. 4. .1839	Cu3247 324.754 (103) ppb 1986. 1. .0295	Fe2599 259.940 {129} ppb 2120. 3. .1289
#1 #2		2112. 2116.	2084. 2090.	1985. 1990.	1986. 1987.	2118. 2122.
Elem Line Jnits Avg Stddev &RSD	G 206.866 <	e2068 {162} .0000 .1700 .7182	In2306 230.606 {146} ppb <.0000 .7435 20.27	K 7664 766.490 { 44} ppb 9882. 26. .2666	Li6103 610.362 { 55} ppb 2120. 6. .2898	Mg3838 383.826 { 87} ppb 2041. 13. .6193
₿1 ₿2	<	.0000	<.0000 <.0000	9863. 9900.	2116. 2125.	2032. 2050.
Elem Line Jnits Avg Stddev &RSD	M: 257.610	n2576 (131) ppb 2021. .0047	Mo2020 202.030 {166} ppb 2049. 47. 2.317	Na5889 588.995 { 57} ppb 1906. 4. .1896	Na5895 589.592 { 57} ppb 2131. 5. .2351	Ni2316 231.604 (145) ppb 2146. 6. .2569
₩1 ₩2		2021. 2021.	2016. 2083.	1904. 1909.	2127. 2134.	2142. 2149.
Elem Line Jnits Avg Stddev &RSD	0: 225.585	52255 {149} ppB 32.27 .31 .9488	Pb2203 220.353 {152} ppb 2219. 7. .3063	Pd3242 324.270 {103} ppb 4242. 82. 1.939	Pt2036 203.646 {164} ppb 364.4 47.5 13.05	Pt2144 214.423 {156} ppb <.0000 39.57 2.254
¥1 ¥2		32.05 32.48	2214. 2224.	4301. 4184.	398.0 330.8	<pre>&lt; .0000 &lt; .0000</pre>

Sample Name: LCS-W, IW Run Time: 07/18/07 14:52

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Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 (171)	208.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	1956.	2054.	3953.	2063.
Stddev	.1954	72.	17.	4.	4.
%RSD	8.740	3.677	.8255	.1069	.1821
#1	<.0000	1905.	2042.	3956.	2060.
#2	<.0000	2006.	2066.	3950.	2066.
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	2079.	24.24	<.0000	<.0000	2187.
Stddev	2.	4.01	.8712	.7035	2.
%RSD	.0951	16.56	.2880	20.33	.0730
<b>#1</b>	2077.	21.40	<.0000	<.0000	2188.
#2	2080.	27.08	<.0000	<.0000	2185.
Elem	V_2924	₩_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Jnits	ppb	ppb	ppb	ppb	
Avg	2032.	<.0000	2071.	.1460	
Stddev	1.	4.292	5.	.0891	
%RSD	.0387	.4656	.2317	61.04	
₩1 ₩2	2031. 2032.	< .0000 < .0000	206B. 2074.	.2090	

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Method: SI	PEX Sample Nam	e: 070622041-001	A,IW Opera	tor:	
Run Time:	07/18/07 14:57 Typ	e: Unk Mode	: CONC Corr	.Fact: 1.000000	
Elem	Ag328	0 Al3082	Al3961	As1937	Au2427
Line	328.068 {102	} 308.215 (109)	396.152 { 85}	193.759 {173}	242.795 {138}
Units	pp	b ppb	ppm	ppb	ppb
Avg	<.000	0 79.32	80.67	7.250	<.0000
Stddev	.242	8 7.13	3.13	.342	.1706
&RSD	20.9	6 8.990	3.887	4.711	5.580
#1	<.000	0 84.36	78.45	7.492	<.0000
#2	<.000	0 74.28	82.89	7.009	<.0000
Elem	B_249	6 Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135	} 493.409 { 68 }	313.042 {107}	190.241 {176}	317.933 {105}
Units	pp	5 ppb	ppb	ppm	ppb
Avg	11.1	8 6.880	.0346	1.187	17560.
Stddev	1.3	8 .003	.0130	1.352	2.
%RSD	12.3	2 .0360	37.58	113.9	.0118
#1	12.1	6 6.881	.0438	.2307	17560.
#2	10.2	1 6.878	.0254	2.143	17560.
Elem	Cd228	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147	228.616 (147)	357.869 { 94}	324.754 {103}	259.940 {129}
Units	pp	ppb	ppb	ppb	ppb
Avg	.180	1727	<.0000	2.959	233.9
Stddev	.037	3 .0760	.9168	1.642	1.4
%RSD	20.7	3 44.00	31.11	55.48	.5947
#1	.206	4 .2264	<.0000	1.798	234.9
#2	.153	5 .1190	<.0000	4.120	233.0
Elem	Ge206	B In2306	K_7664	Li6103	Mg3838
Line	206.866 {162	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	pp	ppb	ppb	ppb	ppb
Avg	<.000	<.0000	788.6	<.0000	4280.
Stddev	.113	.0845	19.6	.1924	10.
&RSD	4.55	5 13.09	2.490	.3306	.2366
#1	<.000	<.0000	802.5	<.0000	4273.
<b>#</b> 2	<.000	<.0000	774.7	<.0000	4287.
Elem	Mn257	5 Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Units	ppt	ppb	ppb	ppb	ppb
Avg	18.68	28.25	6868.	11540.	.3542
Stddev	.03	22.35	153.	98.	.4161
%RSD	.1783	79.10	2.229	.8536	117.5
#1	18.70	44.05	6759.	11470.	.6485
#2	18.60	12.45	6976.	11610.	
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 [103]	203.646 {164}	214.423 {156}
Units	ppF	ppb	ppb	ppb	ppb
Avg	2.946	<.0000	<.0000	<.0000	<.0000
Stddev	1.577	1.197	1891.	23.18	.0310
&RSD	53.53	338.7	3161.	162.2	6.734
#1	1.831	.4931	< .000	< .0000	<.0000
#2	4.060	< .0000	1277.	2.101	

Sample Name: 070622041-001A,IW Run Time: 07/18/07 14:57

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Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	.4981	54.19	8.392	4731.	3.236
Stddev	.5801	49.64	4.203	42.	.467
%RSD	116.4	91.61	50.09	.8839	14.44
#1	.9083	89.30	11.36	4701.	3.566
#2	.0880	19.09	5.420	4761.	2.905
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 {140}	214.281 (157)	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	62.23	3.999	.8046	.4330	6.893
Stddev	2.65	5.353	.3893	1.070	1.410
%RSD	4.259	133.9	48.39	247.2	20.46
#1	60.36	.2135	1.080	1.190	7.890
#2	64.11	7.784	.5293	< .0000	5.895
Elem	V 2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	.4503	.6394	3.665	1.175	
Stddev	3.828	1.171	.207	.535	
&RSD	B50.2	183.2	5.645	45.50	
#1	3.157	< .0000	3.518	.7971	
#2	< .0000	1.467	3.811	1.553	

Method: S	PEX	Sample N	ame:	070622041-002	A,IW	Operat	cor:	
Run Time:	07/18/07	15:01 T	ype:	Dnk Mode	CONC	Corr.	Fact: 1.000000	
Elem Line Units Avg Stddev &RSD	32	Ag3 8.068 {1 <.0 1. 70	280 02} ppb 000 032 .74	Al3082 308.215 {109} ppb 71.07 1.94 2.726	396.152	Al3961 { 85} ppm 69.76 4.04 5.788	As1937 193.759 {173} ppb 2.379 .920 38.66	Au2427 242.795 (138) ppb <.0000 .0277 .8382
<b>#1</b> ∦2		< .0 < .0	000 000	69.70 72.44		72.62 66.90	3.030 1.729	<.0000 <.0000
Elem Line Jnits Avg Stdde⊽ &RSD	24	B_2 9.678 {1 8. 2.	496 35} ppb 211 193 355	Ba4934 493.409 { 68} ppb 6.528 .020 .3046	313.042	Be3130 {107} ppb .0543 .0259 47.79	Bi1902 190.241 {176} ppm 2.076 1.958 94.28	Ca3179 317.933 {105} ppb 17430. 24. .1362
#1 #2		8. 8.	074 347	6.514 6.542		.0359 .0726	3.461 .6921	17410. 17440.
Elem Line Jnits Avg Stddev &RSD	22	Cd2 8.802 {1 .1 .1	288 47} ppb 055 119 6.1	Co2286 228.616 {147} ppb .2158 .0665 30.80	357.869	Cr3578 { 94} ppb <.0000 1.375 137.8	Cu3247 324.754 {103} ppb 6.512 .398 6.118	Fe2599 259.940 {129} ppb 198.9 .5 .2450
#1 #2		.1	847 264	.1688 .2629	< <	.0000	6.794 6.230	198.5 199.2
Elem Line Jnits Avg Stddev &RSD	20	Ge2 6.866 {1 <.0 4. 16	068 62} ppm 000 700 5.3	In2306 230.606 {146} ppb .0478 .0845 176.8	, 766.490	K_7664 { 44} ppb 698.4 7.1 1.023	Li6103 610.362 { 55] ppb <.0000 .5406 .8478	Mg3838 383.826 { 87} ppb 4271. 15. .3569
#1 ₽2		.4 < .0	797 000	<.0000 .1075		703.4 693.3	<.0000 <.0000	4260. 4282.
Elem Line Jnits Avg Stddev &RSD	25	Mn22 7.610 (11 15 .02	576 31) 5pb .68 .00 298	Mo2020 202.030 (166) ppb 2.656 .524 19.72	1 588.995	Na5889 { 57} ppb 7295. 48. .6594	Na5895 589.592 { 57] ppb 11980. 17. .1419	Ni2316 231.604 {145} ppb .2257 .0687 30.43
#1 #2		15. 15.	. 69 . 68	3.027 2.286		7261. 7329.	11990. 11970.	.2742 .1771
Elem Line Jnits Avg Stddev ARSD	22	Os22 5.585 {14 .73 .00 .05	255 19} 59B 328 304 546	Pb2203 220.353 {152} ppb <.0000 .3684 69.48	E 324.270 <	2d3242 {103) ppb .0000 82.07 3.441	Pt2036 203.646 {164} ppb <.0000 2.971 18.60	Pt2144 214.423 (156) ppb .4598 2.075 451.3
⊭1 ⊮2		. 73	31 325	<.0000 <.0000	< <	.0000	< .0000 < .0000	1.927 < .0000

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Sample Name: 070622041-002A,IW Run Time: 07/18/07 15:01

Elem	Ru2402	Sb2068	Sel960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	.1966	4.354	3.169	4700.	1.025
Stddev	.0475	1.943	.772	2.	.958
&RSD	24.16	44.63	24.38	.0416	93.50
#1	.1630	5.728	3.715	4698.	1.702
#2	.2301	2.980	2.622	47 <b>01</b> .	.3473
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 (176)
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	63.08	4.457	<.0000	.1519	5.778
Stddev	1.33	.648	1.347	.3670	.166
&RSD	2.106	14.53	187.2	241.7	2.873
#1	64.01	4.915	< .0000	.4114	5.661
#2	62.14	3.999	.2329	<.0000	5.895
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 [140]	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	1.240	.7869	1.576	.2721	
Stddev	.478	1.055	.055	.8614	
%RSD	38.60	134.1	3.495	316.5	
#1	1.578	.0408	1.615	.8812	
#2	.9014	1.533	1.537	<.0000	

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Method: Si Comment:	PEX Samp	le Name:	CCV-3			Operat	or:			
Run Time:	07/18/07 15:3	12 Type:	Unk	Mode:	CONC	Corr.	Fact:	1.000000		
Elem Line Jnits Avg Stddev %RSD	328.068	Ag3280 3 {102} ppb 484.0 1.8 .3770	A 308.215	13082 {109} ppb 2175.	2 396.152	A13961 { 85) ppm 2148. 10. .4765	193.7	As1937 59 {173} ppb 2083. 4. .1926	242.795	Au2427 {138} ppb <.0000 .1321 .9607
#1 #2		485.3 482.7		2175. 2175.		2156. 2141.		2080. 2085.		<.0000 <.0000
Elem Line Units Avg Stddev &RSD	249.678	B_2496 {135} ppb 1924. 1. .0394	B 493.409	a4934 { 68} ppb 2003. 5. .2685	н 313.042	3e3130 {107} ppb 2093. 1. .0544	190.2	Bi1902 41 {176} ppm 1.186 .047 3.932	317.933	Ca3179 {105} ppb 2116.
#1 #2		1924. 1923.		1999. 2007.		2092. 2093.		1.153 1.219		2115. 2116.
Elem Line Units Avg Stddev %RSD	228.802	Cd2288 2 [147] ppb 2131. 2. .1080	C 228.616	o2286 (147) ppb 2134. 7. .3416	c 357.869	Cr3578 { 94} ppb 1989. 6. .3057	324.7	Cu3247 54 {103} ppb 1970. 2. .0769	259 <b>.</b> 940	Fe2599 (129) ppb 2136. 1. .0621
#1 #2		2133. 2129.		2140. 2129.		1993. 1984.		1968. 1971.		2137. 2135.
Elem Line Units Avg Stddev %RSD	206.866	Ge2068 {162} ppm <.0000 .1699 1.520	I 230.606 <	n2306 {146} ppb .0000 1.622 70.34	к 766.490 1	(7664 { 44} ppb .0080. 43. .4246	610.30	Li6103 52 { 55} ppb 2269. 30. 1.330	1 383.826	1g3838 { 87} ppb 2066. 9. .4248
#1 #2		<.0000 <.0000	< <	.0000 .0000	1 1	.0110. .0050.		2291. 2248.		2073. 2060.
Elem Line Units Avg Stddev &RSD	257.610	Mn2576 {131} ppb 2050. 5. .2260	м 202.030	2020 {166} ppb 2078. 42. 2.041	N 588.995	a5889 { 57] ppb 1985. 22. 1.089	589.59	Na5895 92 { 57} ppb 2073. 17. .8153	1 231.604	12316 {145} ppb 2191. 6. .2892
#1 #2		2054. 2047.	:	2048. 2108.		2000. 1970.		2085. 2061.		2195. 2186.
Elem Line Units Avg Stddev %RSD	225.585	Os2255 {149} ppB 30.49 .09 .3084	Pł 220.353	52203 {152} ppb 2199. 6. .2876	P 324.270	d3242 {103} ppb 2556. 164. 6.420	203.64	Pt2036 16 {164} ppb 404.7 21.4 5.288	214.423 <	Pt2144 {156} ppb .0000 74.79 3.970
#_ #2		30.55	2	2204. 2195.		2672. 2440.		389.6 419.9	<	.0000

Sample Name: CCV-3 Run Time: 07/18/07 15:12

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Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 [176]
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	1968.	2096.	3974.	2126.
Stddev	.2072	82.	5.	5.	8.
%RSD	11.67	4.183	.2248	.1365	.3835
#1	<.0000	1910.	2093.	3978.	2132.
#2	<.0000	2027.	2100.	3970.	2120.
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	2112.	20.39	<.0000	<.0000	2062.
Stddev	12.	4.88	2.423	.7931	4.
&RSD	.5819	23.92	.7850	26.40	.1964
#1	2120.	16.94	< .0000	<.0000	2065.
#2	2103.	23.84	< .0000	<.0000	2059.
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 (157)	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	2027.	<.0000	2094.	1.427	
Stddev	9.	5.500	3.	.713	
&RSD	.4203	.5739	.1440	49.93	
₩1	2021.	<pre>&lt; .0000</pre>	2096.	1.931	
#2	2033.	< .0000	2092.	.9232	

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	Copose c			Page	*
Method: SH	PEX Sample Name:	CCB-3	Operat	cor:	
Run Time:	07/18/07 15:15 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Elem	Ag3280	A13082	A13961	As1937	Au2427
Line	328.068 {102}	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 [138]
Jnits	ppb	ppb	Indd	dqq	daa
Avg	.9014	8.275	<.0000	<.0000	<. 0000
Stddev	.2432	1.258	3.048	.3421	.1925
*RSD	26.98	15.20	209.0	70.76	68.73
#1	1.073	7,386	< .0000	<.0000	< 0000
#2	.7294	9.165	. 6971	<.0000	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 [135]	493.409 { 68}	313.042 {107}	190.241 (176)	317.933 (105)
Units	ppb	ppb	dqq	mqq	daa
Avg	1.324	<.0000	<.0000	<.0000	.1445
Stddev	.386	.1765	.0202	1.865	1.124
%RSD	29.18	389.6	12.88	332.7	777.В
#1	1.597	<.0000	<.0000	< 0000	9391
#2	1.051	.0795	<.0000	.7580	< .0000
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 {147}	357.869 { 94}	324.754 (103)	259,940 (129)
Units	dqq	daa	daa	daa	(כבב) סופונסב ממת
Avq	. 0543	.1487	<.0000	<.0000	6651
Stddev	.0527	.0176	1,832	. 9935	0675
€RSD	96.95	11.85	102.9	569.0	10.14
#1	.0916	.1362	< .0000	<.0000	.7128
#2	.0171	.1612	< .0000	.5279	.6174
Elem	Ge2068	In2306	K 7664	Li6103	Mg3838
Line	206.866 (162)	230.606 {146}	766.490 1 44}	610.362 { 55}	383.826 { 871
Units	DDII	dqq	daa	daa	לוסת לוסת
Avg	<.0000	.3466	<.0000	14.74	7 289
Stddev	.9635	.6084	1.696	. 90	. 390
€RSD	20.56	175.6	25.11	6.088	5.352
#1	<.0000	.7768	< .0000	15.37	7.565
#2	<.0000	<.0000	< .0000	14.10	7.013
Elem	Mn2576	Mo2020	Na5889	Na5895	N12316
Line	257.610 {131}	202.030 (166)	588.995 { 57}	589.592 { 57}	231.604 (145)
Units	ppb	dqq	daa	ממם	
Avg	<.0000	2.958	3.608	<.0000	1343
Stddev	.0026	. 493	.196	.3669	0242
%RSD	6.646	16.67	5.422	1.789	18.05
<b>#1</b>	<.0000	3,307	3.746	< 0000	1514
<b>#</b> 2	<.0000	2.610	3.469	<.0000	.1171
Elem	0s2255	Pb2203	P43242	D+2036	D+0144
Line	225.585 (149)	220.353 (152)	324.270 /1031	203 646 (164)	214 422 (15C)
Units	Rdd	[102]	seriero (103)	203.010 (104)	214.423 [150]
Ava	< 0000	< 0000	טלל		ppb
Stddev	7758	1053	165	0 500	1.029
RSD	150.5	3.595	4.687	38.35	.279 27.07
<b>佳</b> 1	0320	< 0000	2496	< 0000	
≝ <u>→</u> ⊈ 🤈	~ 0000	< 0000	3406.	< .0000	.8323
u -	<.0000	<.0000	3233.	< .0000	1.226

Sample Name: CCB-3 Run Time: 07/18/07 15:15

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	.5817	8.368	.1966	<.0000	.5167
Stddev	.1897	1.963	.6489	4.193	.0480
&RSD	32.61	23.46	330.1	47.11	9.281
#1	.7158	9.756	<.0000	<pre>&lt; .0000 &gt; </pre>	- 5506
#2	.4476	6.979	.6554		- 4828
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	3.656	3.876	.4023	<.0000	<.0000
Stddev	1.393	1.986	1.377	.1223	.9127
&RSD	38.10	51.24	342.3	15.30	88.92
#1	4.641	2.472	1.376	<.0000	<.0000
#2	2.671	5.281	< .0000	<.0000	<.0000
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 [115]	239.709 {140}	213.856 [157]	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	1.577	<.0000	<.0000	<.0000	
Stddev	2.232	.6492	.0260	.0587	
&RSD	141.5	67.68	3.863	6.354	
#1	< .0000	<.0000	<.0000	<.0000	
#2	3.156	<.0000	<.0000	<.0000	

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Method: SI Comment:	PEX Sample Name:	070622041-003A	,IW Opera	tor:	
Run Time:	07/18/07 15:19 Type:	Unk Mode:	CONC Corr	.Fact: 1.000000	
Elem Line Units	Ag3280 328.068 {102}	A13082 308.215 [109]	A13961 396.152 { 85}	As1937 193.759 {173}	Au2427 242.795 (138)
Avg	.5160	65.13	65.20	7.436	2.0000
Stddev	2.125	10.34	4.21	.447	- 3190
#1	2.019	57.82	62 22	5.016	7.953
#2	< .0000	72.44	68.17	7.119	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Units	ppb	ppb	ppb	ppm	ppb
Avg	14.24	7.081	.1566	1.351	17870.
Stddev	1.43	.035	.0184	1.119	191.
%RSD	10.05	- 4955	11.78	82.80	1.067
#1	15.25	7.056	.1435	2.142	18010.
#2	13.22	7.106	.1696	.5602	17740.
Elem Line Units Avg Stddev	Cd2288 228.802 (147) ppb .1567 .1053	Co2296 228.616 {147} ppb .1381 .0461	Cr3578 357.869 { 94} ppb <.0000 6877	Cu3247 324.754 {103} ppb 5.633 1 143	Fe2599 259.940 {129} ppb 206.8
€RSD	67.21	33.39	59.25	20.30	.3230
#1	.0822	.1708	<.0000	4.825	207.3
#2	.2312	.1055	<.0000	6.441	206.3
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	684.6	<.0000	4502.
Stddev	.1695	.0169	9.4	9.493	21.
&RSD	4.756	5.430	1.366	17.03	.4686
#1	<.0000	<.0000	691.3	< .0000	4487.
#2	<.0000	<.0000	678.0	< .0000	4517.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	18.56	16.78	6945.	10490.	.2657
Stddev	.06	9.96	89.	183.	.1374
&RSD	.3215	59.37	1.278	1.743	51.70
₽1	18.61	23.82	7007.	10620.	.3628
₽2	18.52	9.733	6882.	10360.	.1685
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 (152)	324.270 {103}	203.646 {164}	214.423 {156}
Jnits	ppB	ppb	ppb	ppb	ppb
Avg	1.681	<.0000	<.0000	<.0000	.4818
Stddev	1.483	.3158	1645.	30.31	1.734
≹RSD	88.21	11.75	128.4	78.39	360.0
¥1 ¥2	.6326 2.730	<.0000 <.0000	< .000 < .000	< .0000	< .0000

Sample Na	ame:	070622041-003A,IW	Run Time: 07/	18/07 15:19		
Elem		Ru2402	Sb2068	Sel960	Si2881	Sn1899
Line		240.272 {140}	206.833 (162)	196.090 {171}	288.158 [116]	189.989 {176}
Units		ppb	ppb	ppb	ppb	ppb
Avg		.1840	26.35	4.895	4635.	2.829
Stddev		.2546	17.90	.927	48.	.563
%RSD		138.4	67.90	18.95	1.032	19.90
#1		.3641	39.01	5.551	4601.	3.227
#2		.0040	13.70	4.239	4668.	2.431
Elem		5r3464	Ta2400	Te2142	Ti3361	Tl1908
Line		346.446 { 97}	240.063 (140)	214.281 {157}	336.121 {100}	190.864 {176}
Units		ppb	ppb	ppm	ppb	ppb
Avg		63.22	2.137	1.863	.2384	4.546
Stddev		1.78	.648	.569	.4893	.498
%RSD		2.822	30.32	30.53	205.2	10.95
#1		61.96	1.679	2.265	<.0000	4.898
#2		64.48	2.595	1.461	.5843	4.194
Elem Line Units Avg Stddev %RSD		V_2924 292.402 {115} ppb <.0000 .9573 106.0	W_2397 239.709 {140} ppb <.0000 .4753 42.62	Zn2138 213.856 {157} ppb 1.546 .080 5.197	Zr3391 339.198 { 99} ppb .7551 .4754 62.95	
#1 #2		<.0000 <.0000	<.0000 <.0000	1.603 1.490	.4190 1.091	

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Method: Si Comment:	PEX Sample Name	: 070622041-004A	,IW Opera	tor:	
Run Time:	07/18/07 15:24 Type	: Unk Mode:	CONC Corr	.Fact: 1.000000	
Elem	Ag3280	Al3082	Al3961	As1937	Au2427
Line	328.068 {102}	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppm	ppb	ppb
Avg	1.889	106.3	79.84	3.681	<.0000
Stddev	.061	11.7	.36	1.551	.3906
&RSD	3.210	10.96	.4475	42.13	12.04
#1	1.846	98.09	79.59	2.584	<.0000
#2	1.932	114.6	80.10	4.778	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 (107)	190.241 {176}	317.933 {105}
Units	ppb	ppb	ppb	ppm	ppb
Avg	12.49	6.864	.2574	2.703	17480.
Stddev	.15	.072	.0315	.699	43.
%RSD	1.197	1.052	12.25	25.87	.2450
#1	12.59	6.915	.2797	2.209	17450.
#2	12.38	6.813	.2351	3.197	17510.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 {147)	357.869 { 94}	324.754 (103)	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	.1133	<.0000	.5361	10.80	237.3
Stddev	.0658	.0434	2.177	.30	1.0
%RSD	58.12	453.0	406.0	2.760	.4242
#1	.1598	<.0000	< .0000	10.59	236.6
#2	.0667	.0211	2.075	11.01	238.0
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	.4809	.5378	642.5	<.0000	4307.
Stddev	.7926	.8788	.8	1.248	19.
%RSD	164.8	163.4	.1302	2.090	.4408
#1	<.0000	<.0000	641.9	< .0000	4294.
#2	1.041	1.159	643.1	< .0000	4321.
Elem	Mn2576	Mo2020	Na5089	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	18.03	1.896	7567.	10980.	.3457
Stddev	.08	.186	61.	86.	.1737
&RSD	.4644	9.825	.8036	.7828	50.26
#1	17.97	2.028	7524.	10920.	.4605
#2	18.09	1.765	7610.	11040.	
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	1.481	<.0000	<.0000	<.0000	.2410
Stddev	.776	.7500	328.9	18.43	1.456
&RSD	52.44	40.71	40.34	128.9	604.1
₽1 ₽2	2.030 .9317	<.0000 <.0000	< .0000 < .0000	< .0000	< .0000

Sample Name: 070622041-004A,IW Run Time: 07/18/07 15:24

Elem	Ru2402	Sb206B	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.B33 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	.1256	4.164	.2186	4741.	.5760
Stddev	.0532	1.559	.1235	19.	.3953
&RSD	42.34	37.44	56.52	.4008	68.63
<b>#</b> 1	.0880	5.266	.1312	4755.	.8556
#2	.1633	3.061	.3059	4728.	.2965
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	63.12	4.365	<.0000	.7574	3.608
Stddev	3.52	5.440	.4193	.6728	1.991
%RSD	5.571	124.6	282.6	88.84	55.19
#1	65.61	.5181	<.0000	1.233	5.016
#2	60.64	0.211	.1481	.2816	2.200
Elem	V 2924	₩_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 (140)	213.856 {157}	339.198 { 99)	
Units	ppb	ppb	ppb	ppb	
Avg	1.465	<.0000	4.121	1.406	
Stddev	.478	.9623	.006	.148	
%RSD	32.66	133.4	.1440	10.56	
#1	1.127	<.0000	4.117	1.301	
#2	1.804	<.0000	4.125	1.511	

Method: Si Comment:	PEX Sample 1	Name: 07062204	1-005A,	,IW	Operator	*	
Run Time:	07/18/07 15:29	Type: Onk	Mode:	CONC	Corr.Fa	ct: 1.000000	
Elem Line Units Avg Stddev &RSD	Ag: 328.068 {: <.( .(	3280 A LO2} 308.215 ppb 0000 0000 0049	13082 {109} ppb 73.88 16.25 21.99	A 396.152	13961 { 85} 1: ppm 66.29 3.03 4.574	As1937 93.759 {173} ppb 2.993 1.419 47.40	Au2427 242.795 (138) ppb <.0000 .5167 14.45
#1 #2	<.( <.(	0000	62.39 85.37		68.44 64.15	3.996 1.990	<.0000 <.0000
Elem Line Units Avg Stddev &RSD	B 2 249.678 {1 12 .6	2496 B 135} 493.409 ppb 2.20 .08 5575	a4934 { 68} ppb 7.031 .028 .3933	B 313.042	e3130 {107} 19 .3600 .0763 21.20	Bi1902 90.241 {176} ppm 1.253 2.005 160.1	Ca3179 317.933 {105} ppb 17720. 7. .0390
#1 #2	12 12	2.14 2.26	7.011 7.050		.3061 .4140	< .0000 2.670	17730. 17720.
Elem Line Units Avg Stddev &RSD	Cd2 228.802 (1 <.0 .0 27	2288 C 47] 228.616 ppb 0000 0680 3.9	o2286 {147} ppb .1640 .1234 75.24	C. 357.869 <	r3578 { 94} 32 ppb .0000 .1141 15.08	Cu3247 24.754 {103} ppb 8.592 1.447 16.84	Fe2599 259.940 {129} ppb 220.8 1.2 .5415
#1 #2	<.0 .0	0000 233	.2513 .0768	< <	.0000	7.569 9.615	219.9 221.6
Elem Line Units Avg Stddev %RSD	Ge2 206.866 {1 <.0 1. 73	068 I 62} 230.606 ppm 000 361 .86	n2306 {146} ppb .1314 1.555 1183.	K 766.490	_7664 [44]61 ppb 629.8 5.0 .7969	Li6103 0.362 { 55} ppb <.0000 .0990 .1902	Mg3838 383.826 { 87} ppb 4464. 0085
#1 #2	< .0 < .0	000 000 <	1.231 .0000	(	633.3 526.2	<.0000 <.0000	4464. 4464.
Elem Line Units Avg Stddev &RSD	Mn2 257.610 {1 24 .3	576 Ma 31} 202.030 ppb .68 : .09 537 :	2020 (166) ppb 1.251 .019 1.541	Na 588.995 { 6	a5889 { 57} 58 ppb 3064. 15. .1915	Na5895 9.592 { 57} ppb 11010. 92. .8386	Ni2316 231.604 {145} ppb .4271 .2687 62.91
#1 #2	24 24	.62	L.265 L.238	8	3053. 3075.	10940. 11070.	.2371 .6171
Elem Line Units Avg Stddev &RSD	Os2 225.505 [1 .9 1 16	255 Pf 49} 220.353 { ppB 320 <, 508 , 1.8 2	2203 [152] 3 ppb 0000 5000 26.74	Pd 324.270 { 5 1 3	3242 103) 20 ppb 56.10 .891. 371.	Pt2036 3.646 {164} ppb <.0000 17.24 48.82	Pt2144 214.423 {156} ppb 1.205 1.765 146.5
#1 #2	1.	998 <. 000 <.	0000	< 1	.000 .393.	<.0000	2.453

F

Sample Name: 070622041-005A,IW Run Time: 07/18/07 15:29

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176]
Units	ppb	ppb	ppb	ppb	ppb
Avg	.8203	2.585	2.054	4367.	.9318
Stddev	.3369	.558	.557	7.	.4433
%RSD	41.07	21.57	27.10	.1659	47.58
#1	1.059	2.979	1.661	4372.	.6183
#2	.5821	2.191	2.448	4362.	1.245
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 {140}	214.281 (157)	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	65.54	2.350	<.0000	<.0000	3.872
Stddev	3.20	3.973	2.545	.8568	.954
&RSD	4.885	169.0	231.2	1337.	24.64
#1	63.27	5.159	< .0000	<.0000	4.546
#2	67.80	< .0000	.6986	.5417	3.197
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	<.0000	.6229	1.167	.5449	
Stddev	1.915	.9156	.063	.5346	
%RSD	423.0	147.0	5.386	98.11	
#1	.9014	1.270	1.122	.1669	
#2	< .0000	< .0000	1.211	.9229	

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page 1

Method: S	PEX Sample 1	Name:	070622041-006A,	IW Ope	rator:	
Run Time:	07/18/07 15:32	Iype:	Unk Mode:	CONC Co	rr.Fact: 1.000000	
Elem Line Units Avg Stddev %RSD	Ag: 328.068 { .: .! 21	3280 102} ppb 3014 3502 32.1	Al3082 308.215 (109) ppb 108.2 16.8 15.54	Al39 396.152 { 8 p 99. .10	61         As1937           5}         193.759 {173}           pm         ppb           84         2.045           10         1.761           31         86.10	Au2427 242.795 {138} ppb <.0000 .1490 4.581
#1 #2	<.(	0000 9027	120.1 96.33	99. 99.	77         3.290           92         .8000	<.0000 <.0000
Elem Line Units Avg Stddev %RSD	в 2 249.678 { 6 1	2496 135} ppb .387 .070 .088	Ba4934 493.409 { 68} ppb 7.451 .175 2.348	Be31 313.042 {10 p <.00 .04 101	30     Bil902       7}     190.241 {176}       pb     ppm       00     <.0000	Ca3179 317.933 {105} ppb 16900. 131. .7770
#1 #2	6 6	.436 .338	7.327 7.575	<.00 .02	00 .0328 83 <.0000	16800. 16990.
Elem Line Units Avg Stddev &RSD	Cd2 228.802 {1 .: .( 9.	2288 L47} ppb L381 )132 .536	Co2286 228.616 {147} ppb .1631 .0570 34.93	Cr35 357.869 { 9 pi <.00 1.8 56.1	78         Cu3247           4)         324.754 {103}           pb         ppb           00         2.714           33         1.494           00         55.04	Fe2599 259.940 (129) ppb 251.2 2.7 1.078
#1 #2	.1	L474 L288	.2034 .1228	< .00 < .00	00 1.658 00 3.770	249.2 253.1
Elem Line Units Avg Stddev &RSD	Ge2 206.866 {] <.( .1 4.	2068 162} ppm 0000 1687 .254	In2306 230.606 {146} ppb .8844 .9635 108.9	K_76 766.490 { 4 [P] 575 6 1.1	64 Li6103 4} 610.362 { 55} pb ppb .3 <.0000 .7 .5516 58 .8393	Mg3038 383.826 { 87} ppb 4330. 33. .7590
#1 #2	<.( <.(	0000	.2031 1.566	570 580	.6 <.0000 .0 <.0000	4307. 4354.
Elem Line Units Avg Stddev &RSD	Mn2 257.610 {1 26 .8	2576 .31} ppb 5.28 .22 226	Mo2020 202.030 {166} ppb .4995 .2135 42.75	Na58) 588.995 { 5 91 9752 135 1.38	89         Na5895           7}         589.592 { 57}           pb         ppb           2.         11610.           5.         158.           34         1.365	Ni2316 231.604 {145} ppb .3714 .1657 44.60
#1 #2	2 G 2 G	5.13 5.43	.3485 .6505	9656 984	5. 11500. 7. 11720.	.2542 .4885
Elem Line Units Avg Stddev %RSD	Os2 225.585 {1 4. 6.	255 49} ppB 210 260 173	Pb2203 220.353 {152} ppb <.0000 1.329 132.3	Pd324 324.270 {103 pr <.000 1315 161.	12     Pt2036       3}     203.646 {164}       bb     ppb       00     <.0000	Pt2144 214.423 {156} ppb <.0000 .3095 64.24
#1 #2	4. 4.	394 027	< .0000 < .0000	< .00 114.	00 < .0000 0 < .0000	<.0000 <.0000

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Paye -

Sample Name: 070622041-006A,IW Run Time: 07/18/07 15:32

Elem	Ru2402	Sb2068	Sel960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	3.919	<.0000	4228.	.9911
Stddev	.4969	.981	.0307	19.	.0241
%RSD	182.6	25.03	15.60	.4604	2.431
#1	.0793	4.612	<.0000	4214.	.9740
#2	<.0000	3.225	<.0000	4242.	1.008
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	59.85	1.373	1.821	1.017	2.024
Stddev	1.40	1.642	.509	.123	.747
&RSD	2.340	119.5	27.95	12.05	36.90
41	58.86	2.534	1.461	.9306	2.552
#2	60.84	.2126	2.181	1.104	1.496
Elem	V_2924	₩_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	1.465	<.0000	3.052	.5239	
Stddev	1.436	.2781	.018	.0890	
%RSD	97.98	20.08	.5982	16.99	
#1	2.481	<.0000	3.065	.4610	
#2	.4501	<.0000	3.040	.5869	

							• • • • • • •	Fear	
Method: Si	PEX	Sample	Name:	0706220	41-007A	,IW	Operai	tor:	
Run Time:	07/18/07	15:38	Type:	Unk	Mode:	CONC	Corr	Fact: 1.00000	)
Elem Line Units Avg Stddev %RSD	3	A 28.068	g3280 {102} ppb .4729 1.578 333.7	308.215	A13082 {109} ppb 127.0 4.6 3.659	396.15	A13961 2 { 85} ppm 126.8 .9 .6840	As1933 193.759 {173} pph 1.617 .525 32.49	Au2427 242.795 (138) ppb <.0000 .1098 3.155
₩1 #2		<	.0000 1.589		130.3 123.7		127.4 126.1	1.989 1.246	<pre>     &lt;.0000     &lt;.0000 </pre>
Elem Line Units Avg Stddev &RSD	2	B 49.678	_2496 {135} ppb 6.275 .334 5.319	493.409	Ba4934 { 68} ppb 8.533 .106 1.239	313.04	Be3130 2 {107} ppb <.0000 .0189 70.52	Bi1902 190.241 {176] ppm <.0000 .6992 66.28	Ca3179 317.933 {105} ppb 17220. 18. .1049
#1 #2			6.039 6.511		8.458 8.608		<.0000 <.0000	<.0000 <.0000	17210. 17240.
Elem Line Units Avg Stddev &RSD	2	C 28.802	d2288 (147) ppb .0590 .0022 3.710	228.616	Co2286 (147) ppb .0796 .0909 114.2	357.86	Cr3578 9 { 94} ppb <.0000 1.260 100.9	Cu3247 324.754 (103) ppb 11.90 .64 5.373	Fe2599 259.940 {129} ppb 256.2 .5 .1895
#1 #2			.0574 .0605		.1439 .0154	•	< .0000 < .0000	11.45 12.35	255.8 256.5
Elem Line Units Avg Stddev %RSD	2	G 06.866 < :	e2068 (162) ppm .0000 2.208 1101.	230.606	In2306 {146} ppb .0717 .4562 636.4	766.49(	K_7664 D { 44} ppb 661.4 2.7 .4070	Li6103 610.362 { 55} ppb <.0000 2.111 3.252	Mg3838 383.826 { 87} ppb 4399. 8. .1839
#1 #2		<	1.361 .0000		.3943 <.0000		659.5 663.3	<pre>&lt; .0000 &lt; .0000</pre>	4393. 4405.
Elem Line Units Avg Stddev %RSD	2	Мл 57.610 - 2	2576 [131] ppb 28.25 .09 .3323	202.030	Mo2020 [166] ppb .5434 .0505 9.289	588.995	Na5889 5 { 57} ppb 9741. 22. .2220	Na5895 589.592 { 57) ppb 11570. 70. .6024	Ni2316 231.604 (145) ppb .1400 .1899 135.6
#1 #2			28.31 28.18		.5077 .5791		9725. 9756.	11520. 11620.	.0057 .2742
Elem Line Units Avg Stddev &RSD	22	02 25.585 ( 4 1	s2255 [149} ppB 1.194 .801 L9.09	1 220.353	Pb2203 {152} ppb <.0000 .6842 26.17	324.270	Pd3242 (103) ppb <.0000 412.3 233.0	Pt2036 203.646 {164} ppb <.0000 7.133 26.94	Pt2144 214.423 {156} ppb .9637 .6194 64.27
#1 #2		4	l.760 8.628	<	<.0000 <.0000	<	.0000 114.6	<pre>&lt; .0000 &lt; .0000</pre>	1.402 .5257

paye 2

Sample Name: 070622041-007A,IW Run Time: 07/18/07 15:38

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	1.714	<.0000	3787.	.3303
Stddev	.0531	1.443	1.453	7.	.0718
&RSD	18.65	84.17	246.2	.1754	21.75
#1	<.0000	2.735	< .0000	3783.	.3811
#2	<.0000	.6940	.4371	3792.	.2795
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 (176)
Units	ppb	ppb	ppm	ppb	ppb
Avg	65.16	5.159	.9315	1.818	1.643
Stddev	.37	1.814	1.527	.093	1.784
%RSD	.5656	35.16	163.9	5.112	108.6
#1	64.90	6.441	2.011	1.884	2.904
#2	65.42	3.876	< .0000	1.752	.3813
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140)	213.856 (157)	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	<.0000	.2704	3.336	.8808	
Stddev	3.510	.9969	.040	.8323	
%RSD	388.7	368.7	1.189	94.49	
#1	1.579	.9753	3.365	.2923	
#2	< .0000	<.0000	3.308	1.469	

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paye 1

Method: SPEX Sample Name: 070622041-007ADP,IW Operator: Comment: Run Time: 07/18/07 15:42 Type: Unk Mode: CONC Corr.Fact: 1.000000 Ag3280Al3082Al3961As1937Au2427328.068 {102}308.215 (109)396.152 { 85}193.759 {173}242.795 {138} Elem Line Jnits 
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 Cd2288
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 Cr3578
 Cu3247
 re2355

 228.802 {147}
 228.616 {147}
 357.869 [94]
 324.754 {103}
 259.940 [129]

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 Line Units Avg Stddev &RSD 10.24 .1976 .1401 < .0000 1.587 <.0000 #1 255.9 11.02 .1102 **#**2 255.2 Ge2068 In2306 K\_7664 Li6103 Elem Mq3838 Line 206.866 {162} 230.606 {146} 766.490 ( 44) 610.362 { 55} 383.826 { 87} 
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 257.610 {131}
 202.030 {166}
 588.995 { 57}
 589.592 { 57}
 231.604 {145}

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 36.53

 Line Units Avq Stddev ₽RSD .4418 9834. 11500. .4144 9926. 11540. 28.19 **문** [ .2542 28.15 **‡**2 .4314 Os2255 Pb2203 Pd3242 Pt2036 Elem Pt2144 
 OS2255
 PD2203
 Pd3242
 Pt2036
 Pt2144

 225.585 {149}
 220.353 {152}
 324.270 {103}
 203.646 {164}
 214.423 {156}

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page e

Sample Name: 070622041-007ADP,IW Run Time: 07/18/07 15:42

Elem	Ru2402	Sb2068	Sel960	Si2801	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	208.158 {116}	189.989 (176)
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	1.347	<.0000	3807.	.4828
Stddev	.7281	1.578	.4018	8.	.1677
&RSD	222.9	117.1	167.1	.2040	34.74
#1	.1882	2.463	<.0000	3802.	.3642
#2	<.0000	.2312	.0436	3813.	.6014
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	63.74	3.358	<.0000	1.233	2.610
Stddev	5.85	.820	.9581	.000	.912
%RSD	9.174	24.42	348.1	.0256	34.96
#1	67.88	2.778	.4023	1.234	1.965
#2	59.61	3.938	<.0000	1.233	3.256
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	<.0000	<.0000	3.307	1.091	
Stddev	.1598	.1044	.007	.119	
%RSD	15.72	30.30	.2073	10.90	
₩1	<.0000	<.0000	3.312	1.007	
#2	<.0000	<.0000	3.302	1.175	

0.,10,0, 10.00.10 Page 1

Method: SH	EX Sample Name:	070622041-007A	MS,IW Operat	tor:	
Run Time:	07/18/07 15:47 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Elem	Ag3280	Al3082	Al3961	As1937	Au2427
Line	328.068 (102)	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 (138)
Units	ppb	ppb	ppm	ppb	ppb
Avg	46.15	2219.	2208.	45.04	<.0000
Stddev	.12	23.	4.	.79	.5062
&RSD	.2641	1.021	.1959	1.751	6.873
#1	46.23	2203.	2 <b>2</b> 11.	<b>44.4</b> 8	<.0000
#2	46.06	2235.	2205.	<b>45.6</b> 0	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Units	ppb	ppb	ppb	ppm	ppb
Avg	5.015	2123.	56.23	<.0000	17960.
Stddev	.114	7.	.12	1.911	32.
%RSD	2.275	.3337	.2199	207.0	.1795
#1	4.934	2118.	56.14	.4283	17940.
#2	5.096	2128.	56.31	< .0000	17990.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 {147}	357.869 { 94}	324.754 {103}	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	52.01	521.0	207.5	261.9	1369.
Stddev	.18	1.8	1.4	2.0	7.
&RSD	.3545	.3548	.6610	.7589	.5446
#1	51.88	519.7	206.6	260.5	1364.
#2	52.14	522.3	208.5	263.3	1374.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 07}
Units	ppm	ppb	ppb	ppb	ppb
Avg	9.088	1.852	679.7	<.0000	4567.
Stddev	3.681	.101	1.8	.9933	10.
%RSD	40.50	5.471	.2604	1.428	.2291
#1	6.486	1.781	678.5	<.0000	4560.
#2	11.69	1.924	681.0	<.0000	4575.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 (166)	588.995 (57)	589.592 { 57]	231.604 (145)
Units	ppb	ppb	ppb	ppb	ppb
Avg	556.5	1.128	9830.	11420.	539.8
Stddev	1.9	.062	27.	82.	2.6
%RSD	.3481	5.506	.2771	.7204	.4745
#1	555.2	1.172	9811.	11370.	537.9
#2	557.9	1.084	9849.	11480.	541.6
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 [103]	203.646 {164}	214.423 [156]
Units	ppB	ppb	ppb	ppb	ppb
Avg	18.69	18.51	347.2	76.49	<.0000
Stddev	.49	1.30	1480.	12.48	.0000
%RSD	2.645	7.036	426.2	16.32	.0002
#1	19.04	17.59	1394.	67.66	<.0000
#2	18.34	19.43	< .000	85.31	<.0000

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Paye 2

Sample Name: 070622041-007AMS,IW Run Time: 07/18/07 15:47

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	549.1	11.78	4012.	.2541
Stddev	.5505	1.9	1.08	38.	.2276
%RSD	25.39	.3505	9.183	.9419	89.57
#1	<.0000	547.7	11.01	3985.	.0932
#2	<.0000	550.4	12.54	4038.	.4150
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	67.67	13.89	<.0000	.6276	44.08
Stddev	2.25	.95	1.587	.0612	1.24
%RSD	3.331	6.835	1.935	9.747	2.823
#1	66.08	14.56	< .0000	.6709	44.96
₩2	69.27	13.22	< .0000	.5844	43.20
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140]	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	528.7	<.0000	548.0	.7762	
Stddev	4.3	2.608	3.0	.1485	
%RSD	.8137	1.144	.5384	19.14	
튭1	525.6	< .0000	545.9	.6712	
#2	531.7	< .0000	550.1	.8812	

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paye 1 ator:

Method: S	PEX Sample Name:	070622041-007AA,IW Operator:			
Comment: Run Time:	07/18/07 15:51 Type:	Unk Mode:	CONC Corr	Fact: 1.000000	
Elem	Ag3280	A13082	Al3961	As1937	Au2427
Line	328.068 (102)	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppm	ppb	ppb
Avg	83.98	3729.	3690.	77.35	<.0000
Stddev	1.90	12.	2.	.74	.1430
%RSD	2.266	.3221	.0585	.9512	1.491
#1	82.64	3738.	3689.	76.83	<.0000
#2	85.33	3721.	3692.	77.87	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 [ 68}	313.042 {107}	190.241 {176}	317.933 {105}
Units	ppb	ppb	ppb	ppm	ppb
Avg	3.917	3591.	94.63	<.0000	17040.
Stddev	.018	9.	.00	.0932	61.
&RSD	.4475	.2639	.0031	25.69	.3603
#1	3.904	3598.	94.62	<.0000	17000.
#2	3.929	3584.	94.63	<.0000	17090.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 {147}	357.869 { 94}	324.754 {103}	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	93.18	932.2	358.9	452.6	2224.
Stddev	.61	5.6	3.2	1.4	12.
%RSD	.6496	.6021	.9017	.2997	.5590
#1	92.75	928.2	361.2	451.6	2215.
#2	93.61	936.2	356.6	453.5	2233.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	303.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	19.26	6.273	652.6	<.0000	4309.
Stddev	2.89	.406	.6	1.831	14.
&RSD	15.00	6.466	.0979	2.674	.3181
#1	21.30	6.560	653.1	< .0000	4299.
#2	17.22	5.987	652.2	< .0000	4318.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	974.0	2.338	9900.	11400.	968.1
Stddev	5.3	.182	15.	14.	5.3
&RSD	.5401	7.802	.1520	.1242	.5498
<b>#1</b>	970.3	2.467	9889.	11410.	964.3
#2	977.7	2.209	9910.	11390.	971.8
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	30.62	34.42	1103.	157.2	<.0000
Stddev	.52	.99	1398.	37.4	2.974
%RSD	1.691	2.866	126.7	23.82	8.862
#1	30.99	33.72	114.6	130.7	< .0000
#2	30.25	35.12	2091.	183.7	< .0000

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Sample Name: 070622041-007AA,IW Run Time: 07/18/07 15:51

Elem	Ru2402	Sb2068	Sel960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	208.158 {116}	189.989 {176]
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	924.5	24.78	3787.	.5505
Stddev	.3729	60.0	1.85	22.	.2875
%RSD	10.34	6.487	7.483	.5798	52.22
#1	<.0000	882.1	26.09	3771.	.7538
#2	<.0000	966.9	23.47	3802.	.3472
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 (140)	214.281 {157}	336.121 {100}	190.864 (176)
Units	ppb	ppb	ppm	ppb	ppb
Avg	61.21	19.32	<.0000	<.0000	80.33
Stddev	4.53	4.75	.0006	.3977	.33
%RSD	7.393	24.58	.0004	51.11	.4127
#1	58.01	15.96	<.0000	<.0000	80.09
#2	64.41	22.68	<.0000	<.0000	80.56
Elem	V_2924	₩_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	911.4	<.0000	975.1	.6919	
Stddev	.3	2.097	5.4	.8024	
%RSD	.0280	.5105	.5577	116.0	
#1	911.6	< .0000	971.3	1.259	
#2	911.3	< .0000	979.0	.1245	
Analysis	Report				
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Method: S	PEX Sample	Name:	070622041-007A	L,IW Opera	tor:	
Comment: Run Time:	07/18/07 15:56	Type:	Unk Mode:	CONC Corr	.Fact: 1.000000	
Elem Line Units Avg Stddev &RSD	Ag 328.068 { <. 3	3280 102} ppb 0000 4250 3.02	Al3082 308.215 {109} ppb 72.00 17.49 24.29	A13961 396.152 { 85} ppm 41.29 1.26 3.041	As1937 193.759 {173} ppb 1.877 .263 14.01	Au2427 242.795 {138} ppb <.0000 .2531 58.61
#1 #2	<. <.	0000 0000	59.63 84.36	40.40 42.18	1.691 2.063	<.0000 <.0000
Elem Line Units Avg Stddev &RSD	B_ 249.678 { 1 2	2496 135} ppb .051 .263 5.06	Ba4934 493.409 { 68} ppb 2.134 .059 2.781	Be3130 313.042 {107} ppb .0294 .0278 94.58	Bi1902 190.241 {176} ppm .2306 1.678 727.7	Ca3179 317.933 {105} ppb 3984. 4. .0925
₩1 ₩2	1	8644 .237	2.092 2.176	.0491 .0097	< .0000 1.417	3986. 3981.
Elem Line Units Avg Stddev &RSD	Cd 228.802 { 9	2288 147} ppb 1397 1295 2.71	Co2286 228.616 (147) ppb .1928 .0583 30.25	Cr3578 357.869 { 94} ppb <.0000 .9167 35.28	Cu3247 324.754 (103) ppb 2.994 .896 29.91	Fe2599 259.940 {129) ppb 58.81 .04 .0697
#1 #2		2312 0481	.2341 .1516	<.0000 <.0000	2.361 3.628	58.84 58.78
Elem Line Units Avg Stddev &RSD	Ge 206.866 ( <. 1 6	2068 162} ppm 0000 .302 1.35	In2306 230.606 {146} ppb 1.864 .152 8.159	K_7664 766.490 { 44} ppb 128.1 1.0 .8096	Li6103 610.362 { 55} ppb <.0000 .1828 .8881	Mg3838 383.826 { 87} ppb 1078. 6. .5778
#1 #2	< . < .	0000 0000	1.972 1.757	127.4 128.9	<.0000 <.0000	1073. 1082.
Elem Line Units Avg Stddev &RSD	Mn 257.610 { 6 1	2576 131} ppb .409 .089 .390	Mo2020 202.030 (166) ppb .1729 .1242 71.83	Na5889 588.995 { 57} ppb 2301. 2. .1076	Na5895 589.592 { 57} ppb 2389. 2. .0715	Ni2316 231.604 (145) ppb .2100 .0424 20.20
#1 #2	6	.472 .346	.2607 .0851	2299. 2303.	2391. 2388.	.2400 .1800
Elem Line Units Avg Stddev %RSD	Os 225.585 { 1 4	2255 149} ppB .215 .589 8.43	Pb2203 220.353 {152} ppb <.0000 .2237 10.83	Pd3242 324.270 [103] ppb <.0000 1398. 77.48	Pt2036 203.646 {164} ppb <.0000 4.160 16.50	Pt2144 214.423 {156} ppb <.0000 2.385 403.3
#1 #2	1	.632 7992	<.0000 <.0000	< .000 < .000	< .0000 < .0000	< .0000 1.095

Sample Name: 070622041-007AL, IW Run Time: 07/18/07 15:56

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	18.35	<.0000	918.3	.7708
Stddev	.4854	4.85	2.318	.0	.1916
%RSD	3813.	26.42	141.4	.0001	24.86
#1	<.0000	21.78	< .0000	918.3	.9063
#2	.3305	14.93	< .0000	918.3	.6353
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	16.37	1.527	.8681	<.0000	2.170
Stddev	.40	.388	.4791	.4282	.124
%RSD	2.432	25.44	55.19	283.8	5.733
#1	16.65	1.801	.5294	<.0000	2.258
#2	16.09	1.252	1.207	.1519	2.082
Elem	V_2924	₩_2397	Zn2138	Zr3391	
Line	292.402 [115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	<.0000	<.0000	.9956	.5031	
Stddev	1.276	.2202	.1630	.4159	
%RSD	128400.	25.83	16.37	82.67	
#1	.9014	<.0000	1.111	.2090	
#2	< .0000	<.0000	.8804	.7971	

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Method: SI	PEX Sample Name	e: CCV-4	Operat	lor:	
Run Time:	07/18/07 16:00 Type	e: Unk Mode:	CONC Corr.	Fact: 1.000000	
Elem	Ag3280	Al3082	Al3961	As1937	Au2427
Line	328.068 (102)	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 {138}
Units	ppb	ppb	ppm	ppb	ppb
Avg	493.1	2156.	2069.	2021.	<.0000
Stddev	1.8	6.	6.	12.	1.001
&RSD	.3730	22665	.2824	.5833	6.794
#1	491.8	2160.	2073.	2013.	< .0000
#2	494.4	2152.	2065.	2029.	< .0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Units	ppt	ppb	ppb	ppm	ppb
Avg	1917.	2074.	2060.	.8897	2025.
Stddev	5.	2.	2.	1.771	1.
&RSD	.2459	1098	.0863	199.1	.0721
#1	1914.	2075.	2061.	2.142	2026.
#2	1920.	2072.	2058.	< .0000	2024.
Elem Line Units Avg Stddev &RSD	Cd2288 228.802 (147) ppt 2113. 4. .2062	Co2286 228.616 {147} 2058. 5. 2058.	Cr3578 357.869 { 94} ppb 1992. 5. .2322	Cu3247 324.754 (103) ppb 2020. 7. .3337	Fe2599 259.940 {129} ppb 2097. 10. .4612
#1	2110.	2054.	1995.	2025.	2090.
#2	2116.	2062.	1988.	2016.	2104.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	9720.	1991.	2027.
Stddev	5.549	.6928	23.		15.
&RSD	22.07	103.5	.2373	.0045	.7450
#1	<pre>&lt; .0000 &lt; .0000</pre>	<.0000	9736.	1991.	2038.
#2		<.0000	9704.	1991.	2017.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57)	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	2010.	2047.	1824.	1868.	2110.
Stddev	1.	57.	4.	2.	8.
&RSD	.0576	2.773	.2249	.1026	.4026
#1	2010.	2007.	1821.	1867.	2104.
#2	2011.	2087.	1827.	1869.	2116.
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 (149)	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	30.99	2067.	4126.	406.4	<.0000
Stddev	1.65	4.	576.	16.6	128.1
%RSD	5.316	.1966	13.95	4.094	7.798
#1	32.15	2065.	4533.	418.2	< .0000
#2	29.82	2070.	3719.	394.6	< .0000

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Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	200.158 (116)	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	1973.	2018.	3981.	2024.
Stddev	.1776	63.	18.	2.	5.
&RSD	6.476	3.177	.9055	.0491	.2362
#1	<.0000	1928.	2005.	3982.	2020.
#2	<.0000	2017.	2031.	3979.	2027.
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 (176)
Units	ppb	ppb	ppm	ppb	ppb
Avg	2043.	23.81	<.0000	<.0000	2003.
Stddev	5.	3.76	.0018	.2752	3.
%RSD	.2690	15.77	.0006	8.054	.1559
#1	2047.	21.15	<.0000	<.0000	2000.
#2	2039.	26.46	<.0000	<.0000	2005.
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 (157)	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	2028.	<.0000	2060.	1.217	
Stddev	2.	10.83	9.	.772	
%RSD	.0902	1.193	.4301	63.45	
#1	2026.	<pre>&lt; .0000</pre>	2054.	.6711	
#2	2029.	< .0000	2067.	1.763	

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Method: SI	PEX	Sample	Name:	CCB-4			Operat	or:		
Run Time:	07/18/07	16:06	Type:	Unk	Mode:	CONC	Corr.	Fact: 1.	000000	
Elem Line Units A⊽g Stddev &RSD	32	А 8.068	g3280 [102] ppb .3864 .2424 62.74	308.215	A13082 [109] ppb 29.79 .61 2.051	396.152	Al3961 2 { 85} ppm <.0000 1.883 297.3	193.759	As1937 9 {173} ppb .6506 .6302 96.86	Au2427 242.795 {138} ppb <.0000 .2749 96.82
#1 #2			.2150 .5578		29.36 30.22		.6980 .0000		1.096 .2050	<.0000 <.0000
Elem Line Units Avg Stddev &RSD	24	B 9.678	_2496 {135} ppb .5543 .2631 47.46	493.409	Ba4934 { 68} ppb .0446 .0431 96.76	313.042	Be3130 2 {107} ppb <.0000 .0335 135.8	190.241	Bi1902 {176} .5604 1.585 282.9	Ca3179 317.933 {105} ppb 1.589 1.941 122.2
#1 ₩2			.7403 .3683		.0141 .0750		<.0000 <.0000	<	: .0000 1.681	.2164 2.962
Elem Line Units Avg Stddev %RSD	22	8.802 <	12288 {147} ppb .0000 .0351 174.0	228.616	Co2286 (147) ppb .0518 .1248 240.9	357.869	Cr3578 9 { 94} ppb <.0000 4.009 450.7	324.754	Cu3247 {103} ppb .6342 .7448 117.4	Fe2599 259.940 {129} ppb .5427 .0936 17.25
#1 #2		<.	.0000 .0046		.1401 <.0000	<	1.945 .0000		.1075 1.161	.6089 .4765
Elem Line Units Avg Stddev %RSD	20	Ge 6.866 <	≥2068 {162} ppm .0000 3.683 L841.	230.606	In2306 {146} ppb .3108 .5240 168.6	766.490	K_7664 { 44} ppb <.0000 .9721 22.11	610.362	Li6103 { 55} ppb 1.981 .508 25.63	Mg3838 383.826 { 87} ppb <.0000 2.141 64.84
#1 #2		< .	.0000 2.404		<.0000 .6813		<.0000 <.0000		1.622 2.340	< .0000 < .0000
Elem Line Units Avg Stddev %RSD	25	Mr 7.610 ( 2	12576 [131] ppb 0000 0134 27.65	202.030	Mo2020 {166} ppb 4.119 1.016 24.67	588.995	Na5889 { 57} ppb 8.852 .072 .8148	589.592	Na5895 { 57} ppb <.0000 .0409 .9269	Ni2316 231.604 {145} ppb .0671 .1757 261.7
#1 #2		<. <.	0000		4.838 3.400		8.903 8.801		<.0000 <.0000	<.0000 .1914
Elem Line Units Avg Stddev %RSD	22	0: 5.585 ( ]	2255 [149] ppB 3662 6103 66.7	220.353	Pb2203 {152} ppb <.0000 .4209 17.07	324.270	Pd3242 {103} ppb <.0000 2218. 103.1	203.646	Pt2036 {164} ppb <.0000 14.86 98.20	Pt2144 214.423 {156} ppb .6572 .4960 75.47
#1 #2		<.	0000 7978		<.0000 <.0000	< <	.000	< <	.0000	.3065 1.008

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## Sample Name: CCB-4 Run Time: 07/18/07 16:06

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 (116)	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	.3056	9.837	.4588	10.40	.5421
Stddev	.0715	1.692	1.020	14.69	.2516
%RSD	23.41	17.20	222.2	141.2	46.42
#1	.2550	11.03	1.180	.0159	.3642
#2	.3561	8.641	< .0000	20.79	.7201
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	.7499	3.694	1.440	<.0000	<.0000
Stddev	2.320	2.935	.150	.5502	1.120
%RSD	309.4	79.45	10.40	54.17	381.9
#1	2.391	1.619	1.546	<.0000	< .0000
#2	< .0000	5.769	1.334	<.0000	.4985
Elem	V_2924	₩ 2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	<.0000	<.0000	<.0000	.1257	
Stddev	1.276	1.356	.0460	.4747	
%RSD	94.26	375.9	78.69	377.6	
#1	< .0000	.5982	<.0000	.4614	
#2	< .0000	< .0000	<.0000	<.0000	

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ANGTADTO V	CPOL C	.,, .		Page	±
Method: SP	EX Sample Name:	CCV-5	Operat	or:	
Run Time:	07/18/07 17:14 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Elem	Ag3280	A13082	Al3961	As1937	Au2427
Line	328.068 {102}	308.215 {109}	396.152 ( 85}	193.759 {173}	242.795 {138}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	490.3	2167.	2102.	2029.	<.0000
Stddev	3.0	2.	16.	4.	.0827
&RSD	.6105	.0855	.7589	.1947	.6010
#1	492.5	2166.	2114.	2032.	<.0000
#2	488.2	2169.	2091.	2026.	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 [105}
Onits	ppb	ppb	ppb	ppm	ppb
Avg	1928.	2072.	2052.	<.0000	2038.
Stddev	7.	2.	2.	1.119	8.
%RSD	.3436	.1083	.0951	57.52	.4000
#1	1932.	2074.	2050.	<pre>&lt; .0000</pre>	20 <b>44</b> .
#2	1923.	2070.	2053.	< .0000	2032.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 {147}	357.869 { 94}	324.754 {103}	259.940 {129}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	2131.	2075.	2012.	2031.	2117.
Stddev	9.	11.	11.	7.	12.
%RSD	.4103	.5294	.5504	.3542	.5786
#1	2137.	2083.	2020.	2036.	2126.
#2	2125.	2067.	2004.	2026.	2108.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146]	766.490 { 44}	610.362 { 55}	383.826 { 87}
Jnits	ppm	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	9855.	2029.	2048.
Stddev	2.888	1.301	23.	15.	5.
%RSD	10.91	92.28	.2347	.7386	.2338
₩1	<pre>&lt; .0000 &lt; .0000</pre>	<pre>&lt; .0000</pre>	9872.	2039.	2044.
#2		< .0000	9839.	2018.	2051.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	2031.	2046.	1847.	1871.	2123.
Stddev	10.	38.	8.	5.	9.
&RSD	.5129	1.846	.4288	.2668	.4317
₿1	2038.	2019.	1853.	1875.	2130.
₿2	2024.	2073.	1842.	1868.	2117.
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Jnits	ppB	ppb	ppb	ppb	ppb
Avg	31.97	2092.	2556.	389.6	<.0000
Stddev	.12	8.	493.	3.6	46.75
&RSD	.3676	.4047	19.30	.9163	2.541
₿1	32.05	2098.	2208.	387.1	< .0000
₿2	31.88	2086.	2905.	392.1	< .0000

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## Sample Name: CCV-5 Run Time: 07/18/07 17:14

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171]	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	1964.	2036.	3979.	2044.
Stddev	.2249	84.	5.	29.	11.
%RSD	7.042	4.259	.2529	.7355	.5200
#1	<.0000	1904.	2032.	3959.	2052.
#2	<.0000	2023.	2039.	4000.	2037.
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 [140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	2059.	22.71	<.0000	<.0000	2016.
Stddev	8.	2.89	1.075	.1836	10.
&RSD	.3870	12.73	.3504	5.623	.5174
#1	2065.	20.66	<pre>&lt; .0000</pre>	<.0000	2024.
#2	2054.	24.75	< .0000	<.0000	2009.
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	2031.	<.0000	2074.	1.973	
Stddev	4.	6.576	8.	.238	
&RSD	.2005	.7068	.3886	12.04	
#1	2028 <i>.</i>	< .0000	2080.	1.805	
#2	2033.	< .0000	2068.	2.141	

					· · , _			Paye	<b>_</b>
Method: 5. Comment:	PEX	Sample	Name:	CCB-5			Operat	cor:	
Run Time:	07/18/0	7 17:23	Type:	Unk	Mode:	CONC	Corr.	Fact: 1.000000	
Elem Line Units Avg Stddev &RSD		A 328.068 <	g3280 {102} ppb .0000 1.274 297.0	2 308.215	13082 {109} ppb 7.812 1.974 25.27	396.152	Al3961 2 { 85} ppm <.0000 .9860 59.83	As1937 193.759 {173} ppb <.0000 .4734 77.02	Au2427 242.795 {138} ppb <.0000 .3630 143.7
#1 #2		<	.4720 .0000		6.416 9.208		<.0000 <.0000	<.0000 <.0000	.0041 <.0000
Elem Line Units Avg Stddev %RSD		B 249.678	_2496 {135} ppb 3.451 .167 1.978	493.409 <	3a4934 { 68} ppb <.0000 .1263 61.88	313.042	Be3130 2 {107} ppb <.0000 .0001 .0974	Bi1902 190.241 {176} ppm <.0000 1.119 50.65	Ca3179 317.933 {105} ppb 1.878 .919 48.95
#1 #2		1	8.569 8.333	<	<.0000 <.0000		<.0000 <.0000	< .0000 < .0000	2.528 1.228
Elem Line Units Avg Stddev %RSD		Cd 228.802	12288 [147] ppb 1878 0307 16.36	C 228.616	Co2286 {147} ppb .0556 .0543 97.53	357.869	Cr3578 9 { 94} ppb <.0000 .9157 70.71	Cu3247 324.754 {103] ppb .3879 .0012 .3077	Fe2599 259.940 {129} ppb .9717 .0272 2.798
#1 #2			1660 2095		.0940 .0173		<.0000 <.0000	.3871 .3888	.9524 .9909
Elem Line Units Avg Stddev &RSD		Ge 206.866 { 2	2068 (162) ppm 0000 5102 25.96	1 230.606 <	n2306 {146} ppb .0000 .1013 7.248	766.490	K_7664 { 44} ppb <.0000 1.805 32.45	Li6103 610.362 { 55} ppb 26.98 .80 2.967	Mg3838 383.826 { 87} ppb 2.750 1.361 49.51
#1 #2		<. <.	0000	<	.0000	<	.0000	26.42 27.55	1.787 3.713
Elem Line Jnits Avg Stddev %RSD		Mr 257.610 { 1	2576 131} ppb 1047 0125 1.90	м 202.030	02020 {166} ppb 4.653 .120 2.590	588.995	Na5889 { 57} ppb 25.68 .19 .7505	Na5895 589.592 { 57} ppb <.0000 .2897 3.148	Ni2316 231.604 (145) ppb .0086 .2464 2857.
₩1 #2		•	1135 0959		4.739 4.568		25.81 25.54	<.0000 <.0000	.1828
Elem Line Jnits Avg Stddev &RSD	:	Os 225.585 { 1	2255 149} ppB 4359 0464 0.64	۳ 220.353 <	b2203 {152} ppb .0000 .3946 19.55	324.270	Pd3242 {103} ppb <.0000 81.37 7.366	Pt2036 203.646 [164] ppb <.0000 2.972 9.822	Pt2144 214.423 {156} ppb .1529 2.818 1843.
#1 ⊮2			4686 4031	< <	.0000	< <	.0000	< .0000 < .0000	2.146 < .0000

0.110/01 11.23.01 Page 2

Sample Name: CCB-5 Run Time: 07/18/07 17:23

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	2.884	.8734	8.920	.2032
Stddev	.4023	.789	1.298	4.211	.1557
%RSD	35.71	27.36	148.6	47.21	76.61
#1	<.0000	3.441	< .0000	5.942	.0931
#2	<.0000	2.326	1.791	11.90	.3133
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	4.453	1.925	3.176	<.0000	<.0000
Stddev	1.327	4.488	.389	.1221	.2076
&RSD	29.79	233.1	12.25	8.968	9.077
#1	3.515	5.099	2.901	<.0000	<.0000
#2	5.391	< .0000	3.451	<.0000	<.0000
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	<.0000	<.0000	.1490	<.0000	
Stddev	1.595	.9040	.0703	.5043	
&RSD	192600.	186.7	47.20	126.4	
#1	1.127	<.0000	.0993	<.0000	
#2	< .0000	.1551	.1988	<.0000	

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Method: SI Comment:	PEX	Sample Na	ame:	CCV-6			Operat	or:			
Run Time:	07/18/07	18:10 T	ype:	Unk	Mode:	CONC	Corr.	Fact: 1.0000	000		
Elem Line Units Avg Stddev %RSD	32	Ag3: 8.068 {1 } 48; .0	280 02} ppb 8.9 .3 701	7 308.215	A13082 {109} ppb 2146. 15. .6896	396.152	Al3961 (85) ppm 2074. 4. .1902	As19 193.759 (17 p 200 .37	937 73) 2 ppb 94. 7. 716	242.795	Au2427 {138) ppb <.0000 .5887 4.359
#1 #2		48: 48:	9.2 8.7		2157. 2136.		2077. 2072.	199 200	19. )9.		<.0000 <.0000
Elem Line Units Avg Stddev %RSD	24	B_2 9.678 {1 19 19	496 35} opb 06. 6. 189	1 493.409	Ba4934 { 68} 2051. 7. .3523	313.042	Be3130 [107] ppb 2037. 2. .1223	Bi19 190.241 {17 F <.00 1.1 104	02 6} 3 ppm 000 .65	317.933	Ca3179 {105} ppb 2019. 3. .1563
#1 #2		19) 19:	D2. 10.		2046. 2057.		2036. 2039.	< .00 < .00	00		2017. 2021.
Elem Line Units Avg Stddev %RSD	22	Cd2: 8.802 {14 1 21: .20	288 47) ppb 11. 4. 000	0 228.616	Co2286 {147} ppb 2042. 6. .2894	( 357.869	Cr3578 { 94} ppb 1997. 4. .1850	Cu32 324.754 (10 p 201 .23	47 3} 2 pb 1. 5. 45	259.940	Fe2599 [129] ppb 2082. 4. .1807
#1 #2		210 21:	08. 14.		2038. 2046.		1999. 1994.	200 201	8. 5.		2080. 2085.
Elem Line Units Avg Stddev %RSD	20	Ge20 6.866 {10 	068 52} opm 000 388 .79	1 230.606 <	[n2306 {146} ppb (.0000 .4393 13.77	F 766.490	<pre>&lt; 7664 { 44} ppb 9716. 101008</pre>	Li61 610.362 ( 5 p 201 .19	03 5} 3 pb 6. 4. 77	1 383.826	Mg3838 { 87} ppb 2026. .0236
#1 #2		<pre>&lt; .00</pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre> <pre></pre>	000	<	.0000 .0000		9709. 9723.	201 201	9. 4.		2026. 2026.
Elem Line Onits Avg Stddev %RSD	25	Mn25 7.610 {13 1 200 .12	576 31} 5pb 01. 3. 259	۳ 202.030	102020 [166] ppb 2024. 47. 2.313	۴ 588.995	Ia5889 { 57} ppb 1824. 1. .0362	Na58 589.592 { 5 p 184 .10	95 7} 2 pb 7. 2. 98	1 231.604	Ni2316 {145} ppb 2094. 6. .2955
#1 #2		200 200	)0. )3.		1991. 2058.		1825. 1824.	184 184	9. 6.		2090. 2098.
Elem Line Units Avg Stddev &RSD	225	Os22 5.585 {14 F 31. 1.5	255 19} 02 47 517	F 220.353	b2203 {152} ppb 2059. 5. .2592	924.270	2d3242 {103} ppb 2963. 1233. 41.62	Pt20. 203.646 {16 pj 390 17 4.4	36 4} 2 pb .0 .2 20	14.423	2t2144 {156} ppb .0000 35.49 1.941
#1 #2		31. 30.	35 69		2055. 2063.		3835. 2091.	377 402	- 8 . 2	< <	.0000

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Sample Name: CCV-6 Run Time: 07/18/07 18:10

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	1975.	1996.	3951.	2013.
Stddev	.5090	58.	14.	23.	6.
&RSD	21.52	2.953	.7018	.5895	.3122
#1	<.0000	1934.	1986.	3935.	2009.
#2	<.0000	2016.	2006.	3967.	2017.
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	2031.	23.08	<.0000	<.0000	1987.
Stddev	4.	3.06	2.097	.2140	9.
&RSD	.1948	13.28	.6925	8.112	.4282
#1	2034.	25.24	< .0000	<.0000	1981.
#2	2028.	20.91	< .0000	<.0000	1993.
Elem	V_2924	₩_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Jnits	ppb	ppb	ppb	ppb	
Avg	1999.	<.0000	2043.	1.112	
Stddev	6.	2.153	6.	1.515	
≹RSD	.3077	.2315	.3024	136.2	
₿1	1994.	< .0000	2039.	2.183	
₩2	2003.	< .0000	2047.	.0409	

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iethod: SPE	X Sample Name:	CCB-6	Operat	or:	
Comment: Run Time: 0	7/18/07 18:14 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
llem	Ag3280	Al3082	A13961	As1937	Au2427
Line	328.068 {102}	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 (138)
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	<.0000	9.654	<.0000	<.0000	<.0000
Stddev	.4855	17.49	1.703	.7098	.2530
MSD	66.58	181.2	168.0	52.98	261.1
₽1	<.0000	< .0000	< .0000	<.0000	.0820
₽2	<.0000	22.02	.1907	<.0000	<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Jnits	ppb	ppb	ppb	ppm	ppb
Avg	5.771	<.0000	<.0000	<.0000	1.806
Stddev	.220	.0443	.0242	1.212	.204
&RSD	3.804	56.14	15.65	53.27	11.31
#1	5.926	<.0000	<.0000	<pre>&lt; .0000</pre>	1.951
#2	5.615	<.0000	<.0000	< .0000	1.662
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 (147)	357.869 { 94}	324.754 {103}	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	.1521	<.0000	<.0000	.4234	.7449
Stddev	.0461	.0258	.5726	.4470	.0426
&RSD	30.29	537.7	16.45	105.6	5.715
#1	.1847	.0134	<.0000	.7395	.714B
#2	.1195	<.0000	<.0000	.1073	.7750
Elem	Ge2068	In2306	K_7664	Li6103	Mg3038
Líne	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	303.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	<.0000	.2028	<.0000	26.92	7.151
Stddev	2.830	.7773	.0464	.64	1.751
&RSD	234.8	383.2	.8375	2.361	24.49
표그	< .0000	.7524	<.0000	26.47	5.913
#2	.7959	<.0000	<.0000	27.37	8.390
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 (145)
Units	ppb	ppb	ppb	ppb	ppb
Avg	.0432	2.716	24.19	<.0000	.0258
Stddev	.0110	.066	.95	.4216	.3797
&RSD	25.53	2.425	3.916	4.080	1474.
#1	.0511	2.670	23.52	<.0000	<.0000
#2	.0354	2.763	24.86	<.0000	.2942
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	<.0000	<.0000	<.0000	<.0000	1.240
Stddev	.7760	.2236	2877.	8.913	.836
&RSD	316.1	10.83	380.4	25.25	67.03
母1 4つ	.3032 <.0000	<.0000 <.0000	1278. < .000	<pre>&lt; .0000 &lt; .0000</pre>	1.839

Sample Name: CCB-6 Run Time: 07/18/07 18:14

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	298.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	2.774	<.0000	14.86	.3386
Stdde⊽	.3668	.135	.4327	4.20	.1317
≹RSD	24.67	4.848	328.5	28.22	38.89
#1	<.0000	2.679	.1742	17.83	.2455
#2	<.0000	2.870	<.0000	11.90	.4318
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 (176)
Units	ppb	ppb	ppm	ppb	ppb
Avg	1.218	4.214	1.990	<.0000	<.0000
Stddev	1.525	.734	1.287	.6114	1.493
%RSD	125.2	17.40	64.67	76.46	145.6
#1	2.297	4.733	2.901	<.0000	.0300
#2	.1401	3.696	1.080	<.0000	< .0000
Elem	V_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	<.0000	<.0000	<.0000	<.0000	
Stddev	2.870	.4058	.0444	.2377	
&RSD	181.8	351.6	66.93	80.78	
#1	< .0000	.1715	<.0000	<.0000	
#2	.4503	<.0000	<.0000	<.0000	

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fethod: S	PEX S	ample Name:	CRI-2	Operat	or:	
Comment: Run Time:	07/18/07	18:18 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
Elem	328	Ag3280	Al3082	Al3961	As1937	Au2427
Line		.068 {102}	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 {138}
Jnits		ppb	ppb	ppm	ppb	ppb
Avg		15.19	<.0000	<.0000	21.56	<.0000
Stddev		.30	8.395	.4477	.60	.3573
&RSD		1.966	14.66	88.28	2.793	22.74
#1		15.40	< .0000	<.0000	21.98	<.0000
#2		14.98	< .0000	<.0000	21.13	<.0000
Elem	249	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line		0.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Units		ppb	ppb	ppb	ppm	ppb
Avg		7.285	.1896	8.705	2.207	3.612
Stddev		.027	.0154	.058	1.677	1.942
&RSD		.3713	8.144	.6706	75.99	53.76
#1		7.265	.2005	8.664	3.393	2.239
#2		7.304	.1787	8.746	1.021	4.985
Elem	228	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line		8.802 {147}	228.616 (147)	357.869 { 94}	324.754 {103}	259.940 {129}
Units		ppb	ppb	ppb	ppb	ppb
Avg		8.662	87.24	16.44	39.66	.8486
Stddev		.124	.30	5.85	.24	.0527
&RSD		1.427	.3412	35.56	.5937	6.210
#1		8.574	87.45	12.30	39.83	.8859
#2		8.749	87.03	20.57	39.49	.8114
Elem	206	Ge2068	In2306	K_7664	Li6103	Mg3838
Line		5.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units		ppm	ppb	ppb	ppb	ppb
Avg		<.0000	.5613	<.0000	6.248	2.887
Stddev		.5667	.3040	1.856	.465	.778
&RSD		5.571	54.15	24.35	7.433	26.94
#1		<.0000	.7762	<pre>&lt; .0000</pre>	6.577	3.437
#2		<.0000	.3464	< .0000	5.920	2.337
Elem	257	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line		7.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57]	231.604 (145)
Units		ppb	ppb	ppb	ppb	ppb
Avg		24.85	1.136	<.0000	6.426	74.82
Stddev		.02	.004	.5520	.636	.11
&RSD		.0998	.3511	66.97	9.900	.1436
#1		24.87	1.133	<.0000	6.876	74.74
#2		24.83	1.139	<.0000	5.976	74.89
Elem	225	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line		5.585 (149)	220.353 [152]	324.270 {103}	203.646 {164}	214.423 {156]
Units		ppB	ppb	ppb	ppb	ppb
Avg		<.0000	5.218	580.7	1.258	5.737
Stddev		.6134	.683	164.8	14.26	.001
%RSD		17.24	13.10	28.38	1133.	.0121
#1		<.0000	5.701	697.3	< .0000	5.736
#2		<.0000	4.735	464.2	11.34	5.737

Sample Name: CRI-2 Run Time: 07/18/07 18:18

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 (176)
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	1.468	105.2	9.067	.0020	.1608
Stddev	.213	4.6	.403	12.59	.2155
&RSD	14.55	4.341	4.441	615800.	134.0
#1	1.317	102.0	8.782	8.904	.3132
#2	1.619	108.5	9.352	< .0000	.0084
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 (140)	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	4.077	10.04	<.0000	<.0000	16.95
Stddev	.397	.35	.9277	.4280	2.20
&RSD	9.733	3.437	87.69	132.1	12.97
#1	4.358	10.29	<.0000	<.0000	15.39
#2	3.797	9.799	<.0000	<.0000	10.50
Elem	V_2924	₩_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	88.15	<.0000	37.03	<.0000	
Stddev	.34	.8319	.05	.2680	
%RSD	.3912	2.603	.1419	19.06	
#1	87.90	<.0000	37.06	<.0000	
#2	88.39	<.0000	36.99	<.0000	

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fethod: S	PEX Sample Name:	ICSA-2	Operator		
Comment: Run Time:	07/18/07 18:22 Type:	Unk Mode:	CONC Corr.Fa	ct: 1.000000	
Elem	Ag3280	Al3082	Al3961	As1937	Au2427
Line	328.068 {102}	308.215 {109}	396.152 { 85} 1	93.759 {173}	242.795 [138]
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	<.0000	376400.	360400.	<.0000	<.0000
Stddev	.0575	952.	2724.	.6245	4.327
≩RSD	.0949	.2530	.7560	3.748	.7361
#1	<.0000	377100.	362300.	<.0000	<pre>&lt; .0000</pre>
⊭2	<.0000	375800.	358500.	<.0000	< .0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68)	313.042 {107} 1	90.241 {176}	317.933 {105}
Jnits	ppb	ppb	ppb	ppm	ppb
Avg	<.0000	2.093	1.534	27.29	341700.
Stddev	2.505	.043	.076	2.10	378.
&RSD	.7888	2.034	4.962	7.685	.1107
#1	<pre>&lt; .0000 &lt; .0000</pre>	2.063	1.480	28.78	342000.
#2		2.123	1.588	25.81	341500.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 {147}	357.869 { 94} 3	24.754 {103}	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	.7368	<.0000	<.0000	111200.
Stddev	.0286	.0244	.4500	.1484	2488.
&RSD	1.670	3.312	.5129	.7006	2.238
#1	<.0000	.7540	<.0000	<.0000	109400.
#2	<.0000	.7195	<.0000	<.0000	112900.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Líne	206.866 {162}	230.606 {146}	766.490 { 44} 6	10.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	.6808	<.0000	<.0000	<.0000	397000.
Stddev	3.795	.1018	.1575	6.985	70.
&RSD	557.4	.3150	.8071	1.692	.0177
#1	< .0000	<.0000	<.0000	<pre>&lt; .0000. &gt; </pre>	397000.
#2	3.364	<.0000	<.0000		396900.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57} 5	89.592 { 57}	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	3.815	65.95	76.95	<.0000
Stddev	.1029	.043	.44	.86	.0365
&RSD	3.878	1.118	.6713	1.120	.3174
#1	<.0000	3.845	65.64	76.34	<.0000
#2	<.0000	3.784	66.26	77.56	<.0000
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152]	324.270 (103) 2	03.646 {164}	214.423 {156}
Units	ppB	ppb	ppb	ppb	ppb
Avg	641.6	<.0000	2440.	2046.	<.0000
Stddev	17.1	.0142	1809.	84.	3.313
&RSD	2.662	.0175	74.13	4.125	3.535
#1	653.7	<.0000	1161.	2105.	<pre>&lt; .0000</pre>
#2	629.5	<.0000	3719.	1986.	< .0000

Sample Name: ICSA-2 Run Time: 07/18/07 18:22

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 [140]	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	26.31	<.0000	.0269	2.389
Stddev	9.113	1.44	.0309	8.403	.443
&RSD	3.823	5.486	.4189	31220.	18.55
#1	< .0000	25.29	<.0000	5.969	2.702
#2	< .0000	27.34	<.0000	< .0000	2.075
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 [140]	214.281 {157}	336.121 {100}	190.864 (176)
Jnits	ppb	ppb	ppm	ppb	ppb
Avg	<.0000	748.0	<.0000	<.0000	<.0000
Stddev	.3948	7.7	.0305	.2769	.1241
≹RSD	.7033	1.034	.0852	.9029	.7986
#1	<.0000	742.5	<.0000	<.0000	<.0000
#2	<.0000	753.5	<.0000	<.0000	<.0000
Elem	V 2924	W_2397	Zn2138	Zr3391	
Line	292.402 (115)	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	12.97	54.71	4.510	<.0000	
Stddev	2.71	2.58	.193	.1765	
&RSD	20.90	4.724	4.271	.5715	
#1	14.89	56.54	4.647	<.0000	
#2	11.05	52.89	4.374	<.0000	

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lethod: SP	EX Sample Name:	ICSAB-2			
Comment: Run Time:	07/18/07 18:26 Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
lem	Ag3280	Al3082	Al3961	As1937	Au2427
ine	328.068 {102}	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 {138}
Jnits	ppb	ppb	ppm	ppb	ppb
Vvg	929.8	419200.	377600.	<.0000	<.0000
Stddev	5.8	2042.	531.	8.570	.1204
SRSD	.6190	.4873	.1407	22.95	.0194
}1	925.8	417700.	378000.	<pre>&lt; .0000 &lt; .0000</pre>	<.0000
}2	933.9	420600.	377200.		<.0000
Elem	B_2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Jnits	ppb	ppb	ppb	ppm	ppb
Avg	<.0000	490.6	460.2	32.20	351100.
Stddev	4.028	.7	2.7	3.54	1310.
¥RSD	1.085	.1484	.5772	11.00	.3732
#1	<pre>&lt; .0000 &lt; .0000</pre>	490.1	458.3	29.70	350200.
#2		491.2	462.0	34.71	352000.
Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 {147}	357.869 { 94}	324.754 {103}	259.940 {129}
Units	ppb	ppb	ppb	ppb	ppb
Avg	989.9	412.7	471.4	437.1	119600.
Stddev	8.7	3.9	4.4	5.3	329.
%RSD	.8804	.9508	.9368	1.217	.2753
#1	983.7	409.9	468.3	433.4	119300.
#2	996.1	415.5	474.5	440.9	119800.
Elem	Ge2068	In2306	K_7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	ppm	ppb	ppb	ppb	ppb
Avg	.9600	7.050	<.0000	<.0000	433700.
Stddev	1.699	.659	.9589	4.467	1007.
%RSD	176.9	9.348	4.663	1.218	.2321
#1	2.161	7.516	<.0000	< .0000	433000.
#2	< .0000	6.584	<.0000	< .0000	434400.
Elem	Mn2576	Mo2020	Na5889	Na5895	Ni2316
Line	257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57]	231.604 {145}
Units	ppb	ppb	ppb	ppb	ppb
Avg	491.6	11.73	72.72	51.63	829.7
Stddev	2.5	6.75	3.50	3.85	7.2
%RSD	.5174	57.51	4.819	7.463	.8666
#1	489.8	16.51	70.24	48.91	824.6
#2	493.4	6.962	75.20	54.36	834.7
Elem	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
Line	225.585 {149}	220.353 {152}	324.270 (103)	203.646 {164}	214.423 {156}
Dnits	ppB	ppb	ppb	ppb	ppb
Avg	1055.	1025.	5173.	2217.	<.0000
Stddev		7.	1233.	11.	2.570
&RSD	.0269	.7269	23.84	.5094	.3822
#1	1054.	1019.	6045.	2225.	<pre>&lt; .0000 &lt; .0000</pre>
#2	1055.	1030.	4301.	2209.	

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page 2

ple Name: ICSAB-2 Run Time: 07/18/07 18:26

iem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Jine	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	41.62	<.0000	<.0000	4.218
Stddev	3.759	12.93	1.669	21.01	.419
%RSD	1.287	31.07	7.761	50.54	9.939
#1	< .0000	50.76	< .0000	< .0000	4.514
#2	< .0000	32.48	< .0000	< .0000	3.921
Elem	Sr3464	Ta2400	Te2142	Ti3361	T11908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 (100)	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	12.43	871.5	<.0000	<.0000	<.0000
Stddev	1.06	5.1	.3892	1.468	.4563
%RSD	8.538	.5896	65.65	3.401	2 408
#1	11.68	867.9	<.0000	< .0000	<.0000
#2	13.18	875.1	<.0000	< .0000	
Elem	V_2924	₩_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Jnits	ppb	ppb	ppb	ppb	
Avg	459.3	19.25	947.1	<.0000	
Stddev	6.4	1.10	7.3	.3268	
&RSD	1.388	5.722	.7760	47.07	
¥1 ≠2	454.8 463.8	18.47 20.03	941.9 952.3	<.0000	

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iethod: SI	PEX	Sample Name	: CCV-7		Operato	or:	
Comment: Run Time:	07/18/07	18:30 Type	: Unk M	Aode: CON	IC Corr.1	Fact: 1.000000	
Elem Line Jnits Avg Stddev &RSD	32	Ag3280 8.068 {102} ppb 487.7 1.8 .3646	A13 308.215 {1 21	3082 L09} 396 ppb L17. 15. 7302	Al3961 5.152 ( 85) ppm 2077. 5. .2195	As1937 193.759 (173) ppb 2001. 7. .3608	Au2427 242.795 {138} ppb <.0000 .0771 .5867
#1 #2		488.9 486.4	21 21	L07 <i>.</i> L28.	2081. 2074.	19 <b>96.</b> 2006.	<.0000 <.0000
Elem Line Units Avg Stdde⊽ %RSD	24	B_2496 19.678 {135} ppb 1905. 5. .2476	Ba4 493.409 { 20	1934 68] 313 ppb 044. 5. 2324	Be3130 3.042 {107} ppb 2029. .0211	Bi1902 190.241 {176} ppm <.0000 1.678 145.4	Ca3179 317.933 {105} ppb 2017. 6. .2823
#1 #2		1902. 1908.	20 20	)47. )40.	2029. 2029.	.0327 < .0000	2021. 2013.
Elem Line Units Avg Stddev &RSD	22	Cd2288 28.802 (147) ppb 2106. 4. .2123	Co2 228.616 {1 20	2286 L47} 357 ppb 044. 4. L845	Cr3578 7.869 ( 94) ppb 1996. 1. .0366	Cu3247 324.754 {103} ppb 2010. 2. .1199	Fe2599 259.940 {129} ppb 2079. 5. .2384
#1 #2		2102. 2109.	20 20	)41. )46 <i>.</i>	1996. 1997.	2012. 2008.	2076. 2083.
Elem Line Units Avg Stddev %RSD	20	Ge2068 06.866 {162} ppm <.0000 1.812 7.026	In2 230.606 {] <.( .7 27	2306 L46} 766 ppb 2000 7436 7.41	K_7664 5.490 { 44} ppb 9678. 5. .0523	Li6103 610.362 { 55} ppb 2006. 2. .1000	Mg3838 383.826 { 87) ppb 2019. 1. .0710
#1 #2		<pre>&lt; .0000 &lt; .0000</pre>	<.( <.(	0000	9675. 9682.	2005. 2008.	2020. 2018.
Elem Line Units Avg Stddev %RSD	25	Mn2576 57.610 {131} ppb 2004. 2. .0829	Mo2 202.030 {] 20	2020 166} 588 ppb 229. 36. .759	Na5889 995 { 57} ppb 1817. 1. .0557	Na5895 589.592 { 57} ppb 1836. 4. .2004	Ni2316 231.604 {145} ppb 2091. 5. .2273
#1 #2		2003. 2005.	20 20	)03. )54.	1817. 1818.	1833. 1838.	2088. 2095.
Elem Line Units Avg Stddev %RSD	22	Os2255 5.585 {149} ppB 31.30 .35 1.127	Pb2 220.353 {J 2] .(	2203 152) 324 ppb 142. 2. )745	Pd3242 .270 {103} ppb 2091. 3289. 157.3	Pt2036 203.646 {164} ppb 373.2 30.3 8.123	Pt2144 214.423 {156} ppb <.0000 66.45 3.474
#1 #2		31.55 31.05	2] 2]	.41. .43.	4417. < .000	351.8 394.6	< .0000 < .0000

Sample Name: CCV-7 Run Time: 07/18/07 18:30

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Jnits	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	1987.	2003.	3927.	2017.
Stddev	.1302	35.	7.	23.	3.
&RSD	4.721	1.747	.3633	.5850	.1249
#1	<.0000	1962.	1998.	3911.	2015.
#2	<.0000	2011.	2008.	3943.	2019.
Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 (100)	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	2029.	22.34	<.0000	<.0000	1987.
Stddev	5.	5.83	3.112	.4281	5.
%RSD	.2259	26.08	1.019	13.65	.2555
#1	2032.	26.46	< .0000	<.0000	1983.
#2	2025.	18.22	< .0000	<.0000	1990.
Elem	v_2924	W_2397	Zn2138	Zr3391	
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Units	ppb	ppb	ppb	ppb	
Avg	1996.	<.0000	2042.	1.007	
Stddev	3.	6.381	6.	.594	
%RSD	.1642	.6865	.2871	58.99	
#1	1994.	< .0000	2038.	.5871	
#2	1998.	< .0000	2046.	1.427	

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fethod: SI	PEX Sample	Name:	CCB-7	Operat	or:	
Comment: Run Time:	07/18/07 18:33	Type:	Unk Mode:	CONC Corr.	Fact: 1.000000	
llem Line Jnits Avg Stddev &RSD	Ag 328.068 { <. 3	3280 102} ppb 0000 5460 18.4	Al3082 308.215 (109) ppb 13.74 2.59 18.87	Al3961 396.152 { 85} ppm <.0000 .4482 18.61	As1937 193.759 {173} ppb .5575 .0259 4.646	Au2427 242.795 (138) ppb <.0000 .0771 13.67
₽1 #2	<.	2146 0000	11.91 15.58	<.0000 <.0000	.5392 .5758	<.0000 <.0000
Elem Line Units Avg Stddev %RSD	B 249.678 { - 4	2496 135} ppb 2440 1054 3.18	Ba4934 493.409 { 68} ppb .0368 .0583 158.3	Be3130 313.042 {107} ppb <.0000 .0278 36.64	Bi1902 190.241 {176} ppm <.0000 1.212 89.67	Ca3179 317.933 {105} ppb 3.756 1.532 40.79
#1 #2		3185 1695	<.0000 .0780	<.0000 <.0000	<pre>&lt; .0000 &lt; .0000</pre>	4.840 2.673
Elem Line Units Avg Stddev %RSD	Cd 228.802 { <. 1	12288 147} ppb 0000 0088 16.14	Co2286 228.616 {147} ppb .0950 .0448 47.15	Cr3578 357.869 { 94} ppb <.0000 3.206 123.8	Cu3247 324.754 {103} ppb .8443 .0495 5.869	Fe2599 259.940 {129} ppb .3165 .0315 9.946
#1 #2	<. <.	. 0000	.1266 .0633	<pre>&lt; .0000 &lt; .0000 </pre>	.8793 .8093	.2943 .338B
Elem Line Units Avg Stddev &RSD	Ge 206.866 { 2 2	2068 (162) ppm .0000 2.719 154.3	In2306 230.606 {146} ppb .1673 .2535 151.5	K_7664 766.490 { 44} ppb <.0000 1.367 21.18	Li6103 610.362 { 55} ppb 7.761 .099 1.280	Mg3838 383.826 { 87} ppb 2.750 2.917 106.1
#1 #2	< .	.1602 .0000	<.0000 .3465	< .0000 < .0000	7.691 7.831	.6874 4.813
Elem Line Units Avg Stddev %RSD	Mr 257.610 { <	2576 (131) ppb .0000 .0035 3.177	Mo2020 202.030 {166} ppb .2360 .0194 8.216	Na5889 588.995 { 57} ppb <.0000 .3062 10.40	Na5895 589.592 { 57] ppb <.0000 .2058 1.029	Ni2316 231.604 [145] ppb <.0000 .1293 4547.
#1 #2	<. <.	.0000	.2223 .2497	<.0000 <.0000	<.0000 <.0000	<.0000 .0886
Elem Line Units Avg Stddev &RSD	0: 225.585 <	s2255 {149} ppB .0000 .2344 14.38	Pb2203 220.353 {152} ppb <.0000 .0657 2.293	Pd3242 324.270 {103} ppb <.0000 82.24 141.0	Pt2036 203.646 {164} ppb <.0000 23.18 689.2	Pt2144 214.423 {156} ppb .2847 .5887 206.8
#1 #2	<	.0000	<.0000 <.0000	<pre>&lt; .0000 &lt; .0000</pre>	< .0000 13.03	.7009 <.0000

		07/18/07 18:34:	6	7-4/2-5	ι
ilysis Repo	ort	10.33			(KIH)
mple Name:	CCB-7 Run Time: 07/18/	07 18:35 Sb2068 Sel	960 Si2881 71} 288.158 {116}	Sn1899 189.989 {176} ppb	
em	240.272 (140) 206.8	333 (102) 10000	ppb ppd	11.87	
ne	ppb	< 0000 .0	655 2.101	.04	
.its	. 5523	1 039	/110 141.8	.2970	
.d	.2069	332.0 10	)86.		
:dde⊽	37.46	5521	< .0000	11.85	
١SD		4218	5682 .0045	11.90	
	.4060	< .0000 <.	0000	-11000	
1	.6986		7142 Ti3361	T11908	
2		Ta2400 Te	2142	190.864 (170)	
1.07	Sr3404 240	.063 {140} 214.281 (	157] bbon ppb	2 0000	
ine	346.446 ( 971 210	ppb	× 134 <.0000	2 281	
hits	5 390	4.152	.6419	129 6	
)MG	1 723	4.014	247.6	120.0	
stddev	31,97	96.68		< 0000	
RSD	51.2		1.927 <.0000	< 0000	
¢100-	6,608	6,990	4,340 .1946		
<b>#1</b>	4,171	1.313			
#2		7 0207 2	n2138 Zr3391	L .	
	V 2924	W 2397	{157} 339.198 ( 99)		
Elem	292 402 (115) 23	9.709 (140) 210.000	ppb ppr		
Line	ppb	< 0000 ·	<.0000 <.0000	6	
Units	1.916	2783	.0207 .595	0	
Avg	.159	14 95	2.960 50:5	0	
Stddev	8.323	11.00	< 000	0	
%R5D		< 0000	<.0000	0	
	1.803	< 0000	<.0000		
#1	2.028				

#⊥ #2

\_\_\_\_ Method Name: mercury Method Description: Element: Hg Date: 06/27/2007 Technique: FI-MHS Calibration Type: Hg, Zero Intercept: Nonlinear Wavelength: 253.7 nm Sample Info Name: HG-J-46.SIF Results Data Set Name: HG-J-46 Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 06/27/2007 Sample ID: Calib Blank ReplSampleConcStndConcBlnkCorrPeakTimePeak#µg/Lµg/LSignalAreaHeightStore10.00020.00060.000211:23:00No Stored 0.0001 0.0003 0.0001 11:23:29 No 2 0.0001 Mean: 0.0001 SD : 48.0724 %RSD: Auto-zero performed. \_\_\_\_\_ Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 06/27/2007 Sample ID: 0.5 ppb SampleConc StndConc BlnkCorr Peak Peak Time Peak µg/L µg/L Signal Area Height Stored 0.0087 0.0397 0.0088 11:24:42 No 0.0087 0.0391 0.0088 11:25:11 No Repl 併 1 2 0.0087 Mean: 0.0000 SD : 0.3116 SRSD: [Hg] Standard number 1 applied. [0.5000] Slope: 0.01737 Correlation Coefficient: 1.00000 Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 06/27/2007 Sample ID: 1.00 ppb 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 0.0177
 0.0785
 0.0179
 11:26:24
 No

 2
 0.0181
 0.0810
 0.0182
 11:26:53
 No
 Stored 2 0.0179 Mean: 0.0002 SD : 1.3943 %RSD: [Hg] Standard number 2 applied. [1.000] Slope: 0.01687 Correlation Coefficient: 1.00000 ويرجن ويحو والبي معرج ومعديمه فلود ويتوجد وفته وينو وكون من ومحو والمحو والمحو والمحو والمحو والمحو والمحو Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 06/27/2007 Sample ID: 2.00 ppb ------ 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 0.0353
 0.1569
 0.0354
 11:28:07
 No

 2
 0.0353
 0.1566
 0.0354
 11:28:36
 No
 0.0353 Mean: 0.0000 SD :



٢

			and the second second second second second second second second second second second second second second second					
Seq. No.	1	AS Loc:	1	Date:	6/27/07			
Sample ID: Elem	Calib Blank SampleConc	StndConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
			0.0002	0.0006	62.5477	0.0002	4.1698	11:23:00
ny			0.0001	0.0003	62.5445	0.0001	4.1690	11:23.29
<u>Auto-zero</u>	performed							
Mean:			0.0001					
SD:			49.07					
%RSD:			40.07					
See No	2	AS Loc:	2	Date:	6 <b>/</b> 27/07	,		
Seq. No.	0.5 pph							-
Elem	SampleConc	StndConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	
			0.0087	0.0397	62.5452	0.0088	4.1697	11:24:42
Hg			0.0087	0.0391	62.5431	0.0088	4,1695	11:25:11
[Hg] Stand	ard number 1 applied.	[0.5000]						
Correlation	Coefficient: 1.00000	Slope: 0.1	01737					
Mean:			0.0007					
SD:			0.00003					
%RSD:			0.51			<u> </u>		
Sea. No.	3	AS Loc:	3	Date:	6 <b>/</b> 27/07	7		
Sample ID:	1.00 ppb		Blank Corr Signal	Dk Area	<b>BG</b> Area	Pk Ht	BG Ht	Time
Elem	SampleConc	StadConc						
			0.0177	0.0785	62.5420	0.0179	4.1695	11:26:24
ny			0.0181	0.0810	62.5431	0.0182	4.1695	11:20:53
[Hg] Stand	ard number 2 applied	(. [1.000] Slope: 0	01687					
<u>Correlation</u>		<u> </u>	0.0179					
mean:			0.00025					
SD:			1.39					
%K30.								
Seq. No.	4	AS Loc:	4	Date:	6/2//0	/		
Sample ID:	2.00 ppb	StndConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
				0 1569	62 5420	0.0354	4,1695	11:28:07
Hg			0.0353	0.1566	62.5442	0.0354	4.1696	11:28:36
	Chartien europ dete	ated Two-coefficier	nt equation used.	0.1000	•===			
S-shaped	calibration curve dete	1. [2.000]	it oquateri tooti					
Correlatio	n Coefficient 0.9998	3 <u>Siope: 0</u>	.01750					
Mean:			0.0353					
SD:			0.00001					
%RSD:			0.02					
Can Ma	5	AS Loc:	5	Date:	6/27/0	)7		
Seq. NO. Semple ID	- 5 00 pph							
Elem	SampleConc	StndConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	1 ime
			0.0912	0.4036	62.5422	0.0913	4.1695	11:29:52
Hg			0.0914	0,4025	62.5408	0.0915	4.1694	11:30:21
[Ho] Star	dard number 4 applie	d. <b>[5.000]</b>						
Correlatio	on Coefficient 0.9999	8 Slope: (	0.01747					
Mean:			0.0913					
SD:			0.00012					
%RSD:			0.13					

Seq. No.	6	AS Loc:	6	Date:	6 <b>/</b> 27/07	,		
Samplé ID: Elem	SampleConc	StndConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
Hg			0.1825 0.1817	0.8099 0.8069	62.5422 62.5354	0.1826 0.1818	4.1695 4.1690	11:31:38 11:32:07
[Hg] Standa Correlation	ard number 5 applied. Coefficient 0.99991	[10.00] Slope: 0.1	01762			- <u> </u>		
Mean:			0.1821					
SD:			0.00058					
%RSD:			0.32					
Seq. No.	7	AS Loc:	4	Date:	6/27/07	,	· .	
Sample ID:	QC Sample 1					01-14	00.14	
Elem	SampleConc	StndConc	Blank Corr Signal	Pk Area	BG Area	PK Ht	BGHt	lime
Hg	2.009µg/L	2.009µg/L	0.0357	0.1568	62.5431	0.0358	4.1695	11:33:27
	2.015µg/L	2.015µg/L	0.0358	0.1592	62.5411	0.0359	4.1694	11:33:50
QC value v	vithin specified limits.							
Mean:	2.012µg/L	2.012µg/L	0.0357					
SD:	0.0041µg/L	0.0041µg/L	0.00007					
%RSD:	0.20		0.20					
Seq. No.	8	AS Loc:	1	Date:	6/27/07	7		
Sample ID:	QC Sample 2					04.14	DC Ut	Time
Elem	SampleConc		Blank Corr Signal	PK Area				
Hg	0.0072µg/L	0.0072µg/L	0.0001	0.0015	62.5465	0.0003	4.1698	11:35:08
-	0.0 <b>068µg/L</b>	0.0068µg/L	0.0001	0.0008	62,5463	0.0002	4.1697	11:35:37
QC value v	within specified limits.							
Mean:	0.0070µg/L	<b>0.00</b> 70µg/L	0.0001					
SD:	0.0003µg/L	0.0003µg/L	0.00001					
%RSD:	4.25		4.25					
Seq. No.	9	AS Loc:	9	Date:	6/27/07	7		
Sample ID:	0.2 PPB							
Elem	SampleConc	StndConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
Hg	0,1899µg/L	0.1 <b>899µg/L</b>	0.0033	0.0159	62.5491	0.0035	4.1700	11:36:47
-	0.1940µg/L	0.1940µg/L	0.0034	0.0161	62.5488	0.0035	4.1699	11:37:17
Mean:	0.1920µg/L	0.1920µg/L	0.0034					
SD:	0.0029µg/L	0.0029µg/L	0.00005					
%RSD:	1.54		1.54					
Sea. No.	10	AS Loc:	10	Date:	6/27/0	7		
Sample ID:	2.0 PPB	StadCase	Blank Corr Skapal	Pk Area	RG Area	Pk Ht	BG Ht	Time
Hg	1.957µg/L	1.957µg/L	0.0348	0.1551	62,5511 62,5700	0.0349	4.1701 4 1700	11:38:29 11:38:58
	<u>1.9/6µg/L</u>				02.0499	0.0002		
Mean:	1.967µg/L	1.967µg/L	0.0349					
SD:	0.0129µg/L	0.0129µg/L	0.00023					
%RSD:	0.65		0.66					
Seq. No.	11	AS Loc:	11	Date:	6/27/0	7		
Sample ID:	MB-S					_		
Elem	SampleConc	StndConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
	0.0213µa/L	0.0213µg/L	0.0004	0.0022	62.5534	0.0005	4.1702	11:40:10
	0.0314µg/L	0.0314µg/L	0.0006	0.0029	62.5543	0.0007	4.1703	11:40:39

.≠an:	0.0263µg/L	0.0263µg/L	0.0005					
SD:	0.0071µg/L	0.0071µg/L	0.00013					
%RSD:	27.13		27.13					
Seq. No.	12	AS Loc:	12	Deter				
Sample II	D: LCS- 0.2/500			Date;	6/27	7/07		
		StndConc	Blank Corr Signal	Pk Area	BG Area	a Pk Ht	BG Ht	Time
Hg	2.956µg/L	2.956µg/L	0.0527	0.2319	62.5568	0.0528	4 1704	
	<u>Z.936µg/L</u>	<u> </u>	0.0523	0.2298	62.5556	0.0525	4 1704	1041:53
mean:	2.946µg/L	2.946µg/L	0.0525					
%RSD:	0.0137µg/∟ 0.46	0.0137µg/L	0.00025 0.47					
Seq. No.			13				·····	
Sample ID	: 070626046-001	A 0 2/100	13	Date:	6/27	/07		
Elem	SampleConc	StndConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BC Ht	
Hg	0.1662µg/L	0.1662ug/l	0.0029	0.0420				
<u> </u>	0.1760µg/L	0.1760ua/L	0.0023	0.0133	62.5588	0.0031	4.1706	11:43:36
Mean:	0.1711µg/L	0.1711µa/L	0.0030		02.5591	0.0032	<u>4.1706</u>	11:44:05
SD:	0.0070µg/L	0.0070ua/l	0.0000					
%RSD:	4.06		4.07					
Seq. No.	14	AS Loc:	14	 Date:	607/	07		
Sample ID:	070626046-0014	DP 0.2/100		-210.	0/2/1	07		
Elem	SampleConc	StndConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
Hg	0.1626µg/L	0.1626µg/L	0.0029	0.0134	62 5617	0.0020	4.4700	
	0.1709µg/L	0.1709µg/L	0.0030	0.0140	62 5623	0.0030	4.1708	11:45:21
Mean:	0.1667µg/L	0.1667µg/L	0.0029				4.1708	<u>11:45:50</u> _
SD:	0.0058µg/L	0.0058µg/L	0.00010					
%RSD:	3.50		3.51					
Seq. No.	15	AS Loc:	15	Date:	607/	7		
Sample ID:	070626046-001A	MS 0.2/100		<b>D40</b> 0,	0/2//	)/		
Elem	SampleConc	StndConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
Hg	2.185µg/L	2.185µg/L	0.0388	0.1694	62 5651	0.0300		
	<u>2.200µg/L</u>	<u>2.200µg/L</u>	0.0391	0.1702	62,5646	0.0390	4.1710	11:47:06
Mean:	2.192µg/L	2.192µg/L	0.0390			0.0002	<u>_4.1710</u>	11:47:35
SD;	0.0102µg/L	0.0102µg/L	0.00018					
%RSD:	0.46		0.47					
Seq. No.	16	AS Loc:	16	Date:	6/27/0	7		
Sample ID:	070626046-002A	0.2/100			012170			
	SampleConc	StndConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
Hg	0.0940µg/L	0.0940µg/L	0.0017	0.0078	62.5671	0.0018	4 1711	11.49.50
	0.1014µg/L	0.1014µg/L	0.0018	0.0086	62.5683	0.0019	4,1712	11.40.02
en.	0.09//µg/L	0.09//µg/L	0.0017					
GRSD:	5.32	0.0052µg/L	0.00009 5.32					
ea. No	17		4.7					
ample ID:	070626046-0024-0	HO LOC:	1/	Date:	6/27/07			
lem	SampleConc	StrdConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BC U	<b>T</b> :
Ha	0081087							lime
יוש (	0.0974µg/L	0.0981µg/L 0.0974µg/L	0.0017 0.0017	0.0081 0.0076	62.5672	0.0019	4.1711	11:50:35
				0.0070	02.0000	0.0018	4.1/12	11:51:04

Elemen Sample	t: Hg Se ID: 070626	q. No.: 15 046-001A MS	AS 0.2/100	Loc.: 15	Date:	06/27/2007	
Repl # 1 2 Mean: SD : %RSD:	SampleConc µg/L 2.185 2.200 2.192 0.01016 0.5	StndConc µg/L 2.185 2.200 2.192 0.01016 0.5	BlnkCo Signal 0.0388 0.0391 0.0390 0.0002 0.4675	r Peak Area 0.1694 0.1702	Peak Height 0.0390 0.0392	Time 11:47:06 11:47:35	Peak Stored No No
Elemen Sample	t: Hg Se ID: 070626	q. No.: 16 046-002A 0.2	A5 2/100	Loc.: 16	Date:	06/27/2007	
Repl # 1 2 Mean: SD : %RSD:	SampleConc µg/L 0.0940 0.1014 0.0977 0.00520 5.3	StndConc µg/L 0.0940 0.1014 0.0977 0.00520 5.3	BlnkCo Signal 0.0017 0.0018 0.0017 0.0001 5.3214	r Peak Area 0.0078 0.0086	Peak Height 0.0018 0.0019	Time 11:48:52 11:49:21	Peak Stored No No
Element Sample	======================================	q. No.: 17 046-003A 0.2	AS 2/100	Loc.: 17	Date:	06/27/2007	
Repl # 1 2 Mean: SD : %RSD:	SampleConc µg/L 0.0981 0.0974 0.0977 0.00050 0.5	StndConc µg/L 0.0981 0.0974 0.0977 0.00050 0.5	BlnkCor Signal 0.0017 0.0017 0.0017 0.0017 0.0000 0.5158	r Peak Area 0.0081 0.0076	Peak Height 0.0019 0.0018	Time 11:50:35 11:51:04	Peak Stored No No
Element Sample	t: Hg Se ID: 070627	q. No.: 18 002-001A 0.2	AS 2/100	Loc.: 18	Date:	06/27/2007	
Repl # 1 2 Mean: SD : %RSD:	SampleConc µg/L 0.0835 0.0896 0.0865 0.00437 5.0	StndConc µg/L 0.0835 0.0896 0.0865 0.00437 5.0	BlnkCor Signal 0.0015 0.0016 0.0015 0.0001 5.0463	r Peak Area 0.0081 0.0074	Peak Height 0.0016 0.0017	Time 11:52:14 11:52:43	Peak Stored No No
Element Sample	t: Hg Se ID: QC Sam	q. No.: 19 ple 1	AS	Loc.: 4	Date: 0	6/27/2007	
Repl # 1 2 Mean: SD : %RSD: QC valu	SampleConc µg/L 1.987 2.016 2.001 0.02011 1.0 ne within sp	StndConc µg/L 1.987 2.016 2.001 0.02011 1.0 pecified lin	BlnkCor Signal 0.0353 0.0358 0.0355 0.0004 1.0126 nits.	r Peak Area 0.1558 0.1578	Peak Height 0.0354 0.0359	Time 11:54:02 11:54:32	Peak Stored No No
Element Sample	: Hg Se ID: QC Sam	q. No.: 20 ple 2	AS	Loc.: 1	Date: 0	6/27/2007	

Repl # 1 2 Mean: SD : %RSD: QC val	SampleConc µg/L -0.0044 0.0115 0.0036 0.01121 314.2 ue within sp	StndConc µg/L -0.0044 0.0115 0.0036 0.01121 314.2 pecified 1:	BlnkCorr Signal -0.0001 - 0.0002 0.0001 0.0002 314.1942 imits.	Peak Area 0.0011 0.0019	Peak Height 0.0000 0.0003	Time 11:55:44 11:56:13	Peak Stored No No	
Elemen	t: Hg See	ц. No.: 21 4ятт	AS L	oc.: 19	Date: 0	6/27/2007		▝≈⊨∞≈
Popj Popj	SampleConc		BlakCorr		Beak		Poak	- <b></b> -
#	uq/L	ug/L	Signal	Area	Height	TTHE	Stored	
1	0.0136	0.0136	0.0002	0.0017	0.0004	11:57:24	No	
2	0.0162	0.0162	0.0003	0.0018	0.0004	11:57:53	No	
Mean:	0.0149	0.0149	0.0003					
SD : %RSD:	12.5	12.5	12.4620					
Sample	ID: LCS-W	д. No.: 22 14811 	AS L(	oc.: 20	Date: 0	6/2//200/		
Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak	
#	µg/L	µg/L	Signal	Area	Height		Stored	
1	1.970	1.970	0.0350	0.1548	0.0351	11:59:05	No	
Z Mean•	1 974	1 974	0.0351	0.1332	0.0352	11:09:34	NO	
SD :	0.00531	0.00531	0.0001					
%RSD:	0.3	0.3	0.2710					
Elemen		q. No.: 23	AS Lo		 Date: 0	6/27/2007		======
Sample	ID: 0706210	023-001A				_ <b>_</b>		
Repl	SampleConc	StndConc	BlnkCorr	Peak	Peak	Time	Peak	
#	µg/L	µд∕⊾	Signal	Area	Height		Stored	
1	0.0128	0.0128	0.0002 (	0.0014	0.0004	12:00:46	No	
2	0.0150	0.0130	0.0003 (	0.0015	0.0004	12:01:15	No	
Mean:	0.0139	0.0139	0.0002					
SD : %RSD:	11.1	11.1	11.1061					
Elemen <sup>†</sup> Sample	t: Hg Sec ID: 070621(	H. No.: 24 023-002A	AS Lo	pc.; 22	Date: 0	6/27/2007		
Renl	SampleConc	StrdCorc	BlakCorr	Peak	Peak	 Time	Peak	
# ***	na/r	ug/L	Signal	Area	Height	TTWC	Stored	
1	0.0051	0.0051	0.0001 (	0.0008	0.0002	12:02:27	No	
2	0.0801	0.0801	0.0014 (	0.0141	0.0015	12:02:57	No	
Mean:	0.0426	0.0426	0.0008					
SD :	0.05303	0.05303	0.0009					
%RSD:	124.5	124.5	124.5535					
Element Sample	t: Hg Sec ID: 0706210	I. No.: 25 )23-003A	AS Lo	oc.: 23	Date: 00	6/27/2007		<u> </u>
Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored	

 

 1
 0.0088
 0.0088
 0.0002
 0.0018
 0.0003
 12:04:17
 No

 2
 0.0063
 0.0063
 0.0001
 0.0004
 0.0002
 12:04:47
 No

 Mean:
 0.0076
 0.0076
 0.0001
 0.0002
 12:04:47
 No

 SD :
 0.00182
 0.00182
 0.0000
 8RSD:
 24.1
 24.1
 24.1174

 يريد ويليري يريد فتبحدي ويرد ويرد ويرد وي ومريخ و وكري بين وي منه وي محمد من شقافة و كمري المعالي ون فقه و Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 06/27/2007 Sample ID: 070621023-003A DP 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 0.0002
 0.0000
 -0.0001
 0.0001
 12:06:01
 No

 2
 0.0118
 0.0118
 0.0002
 0.0022
 0.0003
 12:06:30
 No
 Repl Mean: 0.0060 0.0060 0.0001 SD: 0.00822 0.00822 0.0001 %RSD: 136.8 136.8 136.8384 Element: Hg Seq. No.: 27 AS Loc.: 25 Date: 06/27/2007 Sample ID: 070621023-003A MS 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 1.378
 1.378
 0.0244
 0.1165
 0.0245
 12:07:44
 No

 2
 1.380
 1.380
 0.0244
 0.1161
 0.0246
 12:08:13
 No

 Mean:
 1.379
 1.379
 0.0244
 0.1161
 0.0246
 12:08:13
 No

 SD
 :
 0.00115
 0.0000
 \$2000
 \$2000
 \$2000
 Stored 8RSD: Element: Hg Seq. No.: 28 AS Loc.: 26 Date: 06/27/2007 Sample ID: 070621023-004A 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 -0.0011
 -0.0011
 0.0000
 -0.0008
 0.0001
 12:09:27
 No

 2
 0.0160
 0.0160
 0.0003
 0.0016
 0.0004
 12:09:56
 No

 Mean:
 0.0074
 0.0001
 SD
 :
 0.01207
 0.0002

 %RSD:
 162.2
 162.2
 162.1828
 :
 .
 .
 Element: Hg Seq. No.: 29 AS Loc.: 27 Date: 06/27/2007 Sample ID: 070621023-005A 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 0.0098
 0.0002
 0.0015
 0.0003
 12:11:10
 No

 2
 0.0085
 0.0001
 0.0024
 0.0003
 12:11:39
 No

 Mean:
 0.0091
 0.0091
 0.0002
 SD
 :
 0.00090
 0.0000
 9.9 9.8722 9.9 %RSD: Element: Hg Seq. No.: 30 AS Loc.: 28 Date: 06/27/2007 Sample ID: 070621023-006A \_\_\_\_\_ 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 0.0072
 0.0072
 0.0001
 0.0007
 0.0003
 12:12:55
 No

 2
 0.0086
 0.0002
 0.0010
 0.0003
 12:13:24
 No

 Mean:
 0.0079
 0.0079
 0.0001
 0.0003
 12:13:24
 No

Perkin-Elmer AAWinLab: 06/27/2007, 12:04:17 AM

Perkin-Elmer AAWinLab: 06/27/2007, 12:13:25 AM SD : 0.00101 0.00101 0.0000 %RSD: 12.8 12.8 12.8108 Element: Hg Seq. No.: 31 AS Loc.: 4 Date: 06/27/2007 Sample ID: QC Sample 1 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 1.983
 1.983
 0.0352
 0.1545
 0.0353
 12:14:40
 No

 2
 1.997
 1.997
 0.0355
 0.1573
 0.0356
 12:15:09
 No

 Mean:
 1.990
 1.990
 0.0353
 SD
 0.01017
 0.0002
 %RSD:
 0.5
 0.5
 0.5151
 QC value within specified limits. Element: Hg Seq. No.: 32 AS Loc.: 1 Date: 06/27/2007 Sample ID: QC Sample 2 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 0.0014
 0.0014
 0.0000
 -0.0003
 0.0001
 12:16:21
 No

 2
 -0.0080
 -0.0001
 -0.0037
 0.0000
 12:16:50
 No
 Stored Mean: -0.0033 -0.0033 -0.0001 SD : 0.00663 0.00663 0.0001 %RSD: 199.5 199.5 199.4681 QC value within specified limits. Element: Hg Seq. No.: 33 AS Loc.: 29 Date: 06/27/2007 Sample ID: 070621023-007A 

 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 0.0125
 0.0125
 0.0002
 0.0020
 0.0003
 12:18:04
 No

 2
 -0.0047
 -0.0047
 -0.0001
 -0.0023
 0.0000
 12:18:33
 No

 Mean:
 0.0039
 0.0039
 0.0001
 SD
 :
 0.01217
 0.01217

 %RSD: 308.5 308.5 308.5170 Element: Hg Seq. No.: 34 AS Loc.: 30 Date: 06/27/2007 Sample ID: 070621023-008A - 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 0.0146
 0.0146
 0.0003
 0.0027
 0.0004
 12:19:49
 No

 2
 0.0106
 0.0106
 0.0002
 0.0013
 0.0003
 12:20:19
 No

 Mean:
 0.0126
 0.00285
 0.0001
 SD
 :
 0.00285
 0.0001
 Stored 
 %RSD:
 22.7
 22.6690
 ويرجع ويحدين والمحمد والمتحد والأكر فكتال فكتار ومحمد والمحمد والمحمد والمحمد والمحمد والمحمد والمحم Element: Hg Seq. No.: 35 AS Loc.: 31 Date: 06/27/2007 Sample ID: 070621023-009A 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 0.0077
 0.0077
 0.0001
 0.0007
 0.0003
 12:21:35
 No

 2
 0.0162
 0.0162
 0.0003
 0.0026
 0.0004
 12:22:04
 No

 Mean:
 0.0120
 0.0120
 0.0002
 SD
 :
 0.00606
 0.0001
 Stored

%RSD: 50.6 50.6 50.6265 وهد و و و و و و و و و و و و ويستعدمه المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 06/27/2007 Sample ID: 070621023-010A 

 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 0.0051
 0.0051
 0.0001
 0.0011
 0.0002
 12:23:18
 No

 2
 0.0016
 0.0016
 0.0000
 0.0000
 0.0002
 12:23:47
 No

 Mean:
 0.0034
 0.0034
 0.0001
 SD
 :
 0.00248
 0.00248
 0.0000

 %RSD:
 73.6
 73.6
 73.6076
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
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 :
 :
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 :
 :
 :
 :
 :
 :
 :
 :
 :
 :
 :</td Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 06/27/2007 Sample ID: 070621023-011A 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 0.0090
 0.0002
 0.0011
 0.0003
 12:24:57
 No

 2
 0.0050
 0.0050
 0.0001
 0.0005
 0.0002
 12:25:26
 No
 Stored Mean: 0.0070 0.0070 0.0001 SD : 0.00285 0.00285 0.0001 Mean: 40.8 40.8 40.7773 SRSD: Element: Hg Seq. No.: 38 AS Loc.: 34 Date: 06/27/2007 Sample ID: 070621023-012A 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 0.0026
 0.0026
 0.0000
 -0.0003
 0.0002
 12:26:37
 No

 2
 0.0072
 0.0072
 0.0001
 0.0003
 12:27:06
 No

 Mean:
 0.00322
 0.0001
 0.0001
 SD
 0.00322
 0.0001
 %RSD: 65.7 65.7 65.7066 Element: Hg Seq. No.: 39 AS Loc.: 35 Date: 06/27/2007 Sample ID: 070621023-013A \_\_\_\_\_ 

 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 0.0038
 0.0038
 0.0001
 -0.0006
 0.0002
 12:28:16
 No

 2
 0.0141
 0.0141
 0.0002
 0.0024
 0.0004
 12:28:45
 No

 Mean:
 0.00722
 0.00012
 0.0001
 80.6
 80.6
 80.6
 80.6
 80.6
 80.6
 80.6
 80.6
 80.6
 80.6
 80.6
 80.6
 80.6
 80.6
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 80.6
 80.6
 80.6
 80.6
 80.6
 80.6
 80.6
 80.6
 80.6
 80.6
 80.6
 %RSD: 80.6 80.6306 Element: Hg Seq. No.: 40 AS Loc.: 36 Date: 06/27/2007 Sample ID: 070621023-014A 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Time
 Peal

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stor

 1
 0.0076
 0.0076
 0.0001
 0.0010
 0.0003
 12:29:57
 No

 2
 0.0082
 0.0001
 0.0013
 0.0003
 12:30:26
 No

 Mean:
 0.0079
 0.0079
 0.0001
 SD
 10:00039
 0.0000

 %RSD:
 4.9
 4.9
 4.9456
 10:0000
 10:0000
 10:0000
 Time Peak Stored

Perkin-Elmer AAWinLab: 06/27/2007, 12:22:05 AM

Element: Hg Seq. No.: 41 AS Loc.: 37 Date: 06/27/2007 Sample ID: 070621023-015A 

 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 0.0134
 0.0134
 0.0002
 0.0022
 0.0004
 12:31:38
 No

 2
 0.0022
 0.0022
 0.0000
 -0.0001
 0.0002
 12:32:07
 No

 Mean:
 0.0078
 0.0078
 0.0001
 SD
 :
 0.00793
 0.0001

 %RSD: 102.2 102.2 102.1604 والمحاد والمحادث المحاد والمحاد والمتعاقة فالأناك المند المحدون والتتموي والمحاد والمحاد والمحاد والمحاد والمح Element: Hg Seq. No.: 42 AS Loc.: 38 Date: 06/27/2007 Sample ID: 070621023-016A \_\_\_\_\_ 

 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 0.0130
 0.0130
 0.0002
 0.0025
 0.0004
 12:33:19
 No

 2
 0.0090
 0.0000
 0.0002
 0.0019
 0.0003
 12:33:48
 No

 Mean:
 0.0110
 0.0110
 0.0002
 0.0003
 12:33:48
 No

 SD
 :
 0.00282
 0.00000
 0.0000
 0.0000
 0.0000

 Stored %RSD: 25.6 25.6 25.5749 Element: Hg Seq. No.: 43 AS Loc.: 4 Date: 06/27/2007 Sample ID: QC Sample 1 \_\_\_\_\_ QC value within specified limits. کشار بر با بدی میں دی دی ہوتا ہے کہ میں ایک کار کی کہ وجو ہے جو میں میں بر پر پر پر بر جارے پر بر غرب پر بر Element: Hg Seq. No.: 44 AS Loc.: 1 Date: 06/27/2007 Sample ID: QC Sample 2 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 -0.0019
 -0.0019
 0.0000
 -0.0001
 0.0001
 12:36:42
 No

 2
 0.0090
 0.0002
 0.0007
 0.0003
 12:37:11
 No
 Mean:0.00360.00360.0001SD :0.007730.007730.0001%RSD:215.9215.9215.9054 OC value within specified limits. Element: Hg Seq. No.: 45 AS Loc.: 39 Date: 06/27/2007 Sample ID: 070621023-017A 

 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 0.0057
 0.0057
 0.0001
 0.0009
 0.0002
 12:38:23
 No

 2
 0.0102
 0.0102
 0.0002
 0.0013
 0.0003
 12:38:52
 No

 Mean:
 0.0079
 0.0079
 0.0001
 SD
 :
 0.00322
 0.0001

 8RSD: 40.6 40.5618 Element: Hg Seq. No.: 46 AS Loc.: 40 Date: 06/27/2007

:00158

Sample	ID: 0706210	23-017A DP			
Repl # 1 2 Mean: SD : %RSD:	SampleConc µg/L 0.0026 0.0113 0.0070 0.00613 87.8	StndConc µg/L 0.0026 0.0113 0.0070 0.00613 87.8	BlnkCorr Peak Signal Area 0.0000 0.0002 0.0002 0.0022 0.0001 0.0001 87.8455	Peak Time Height 0.0002 12:40:0 0.0003 12:40:3	Peak Stored 5 No 5 No
Element Sample	t; Hg Sec ID: 0706210	H. No.: 47 23-017A MS	AS Loc.: 41	Date: 06/27/200	7
Repl # 1 2 Mean: SD : %RSD:	SampleConc µg/L 1.552 1.569 1.561 0.01250 0.8	StndConc µg/L 1.552 1.569 1.561 0.01250 0.8	BlnkCorr Peak Signal Area 0.0275 0.1268 0.0278 0.1293 0.0277 0.0002 0.8062	Peak Time Height 0.0276 12:41:4 0.0279 12:42:1	Peak Stored 9 No 8 No
Element Sample	t: Hg Sec ID: 0706210	q. No.: 48 )23-018A	AS Loc.: 42	Date: 06/27/200	 7
Repl # 1 2 Mean: SD : %RSD:	SampleConc µg/L 0.0152 0.0110 0.0131 0.00303 23.1	StndConc µg/L 0.0152 0.0110 0.0131 0.00303 23.1	BlnkCorr Peak Signal Area 0.0003 0.0024 0.0002 0.0016 0.0002 0.0001 23.0908	Peak Time Height 0.0004 12:43:3 0.0003 12:44:0	Peak Stored 1 No 0 No
Element Sample	t: Hg Sea ID: MB-W	q. No.: 49	AS Loc.: 43	Date: 06/27/200	7
Repl # 1 2 Mean: SD : %RSD:	SampleConc µg/L 0.2203 0.2069 0.2136 0.00950 4.4	StndConc µg/L 0.2203 0.2069 0.2136 0.00950 4.4	BlnkCorr Peak Signal Area 0.0039 0.0186 0.0036 0.0148 0.0038 0.0002 4.4492	Peak Time Height 0.0040 12:45:1 0.0038 12:45:4	Peak Stored 4 No 3 No
Element Sample	t: Hg Sea ID: LCS-W	q. No.: 50	AS Loc.: 44	Date: 06/27/200	7
Repl # 1 2 Mean: SD : %RSD:	SampleConc µg/L 1.794 1.809 1.802 0.01079 0.6	StndConc µg/L 1.794 1.809 1.802 0.01079 0.6	BlnkCorr Peak Signal Area 0.0318 0.1461 0.0321 0.1464 0.0320 0.0002 0.6033	Peak Time Height 0.0320 12:46:5 0.0322 12:47:2	Peak Stored 8 No 7 No
Elemen Sample	t: Hg Sec ID: 0706220	q. No.: 51 041-001A	AS Loc.: 45	Date: 06/27/200	7
Repl	SampleConc	StndConc	BlnkCorr Peak	Peak Time	Peak
# μg/L μg/L Signal Area Height Stor 1 0.2066 0.2066 0.0036 0.0179 0.0038 12:48:43 No 2 0.2184 0.2184 0.0039 0.0195 0.0040 12:49:13 No Mean: 0.2125 0.2125 0.0037 SD : 0.00839 0.00839 0.0001 %RSD: 3.9 3.9 3.9507 Stored Element: Hg Seq. No.: 52 AS Loc.: 46 Date: 06/27/2007 Sample ID: 070622041-002A 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 0.0746
 0.0746
 0.0013
 0.0056
 0.0014
 12:50:29
 No

 2
 0.0845
 0.0845
 0.0015
 0.0080
 0.0016
 12:50:58
 No

 Mean:
 0.0796
 0.0796
 0.0001
 SD
 0.00706
 0.0001
 8RSD: 8.9 8.9 8.8761 \_\_\_\_\_ Element: Hg Seq. No.: 53 AS Loc.: 47 Date: 06/27/2007 Sample ID: 070622041-003A \_\_\_\_\_ 

 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 0.1711
 0.1711
 0.0030
 0.0144
 0.0031
 12:52:14
 No

 2
 0.1861
 0.1861
 0.0033
 0.0167
 0.0034
 12:52:43
 No

 Mean:
 0.1786
 0.1786
 0.0031
 SD
 :
 0.01054
 0.0002

 SD :
 0.01054
 0.01054
 0.0062
 :
 :
 50
 :
 50
 :

%RSD: 5.9 5.9 5.9066 Element: Hg Seq. No.: 54 AS Loc.: 48 Date: 06/27/2007 Sample ID: 070622041-004A 

 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 0.0947
 0.0947
 0.0017
 0.0071
 0.0018
 12:53:56
 No

 2
 0.1081
 0.1081
 0.0019
 0.0093
 0.0020
 12:54:25
 No

 Mean:
 0.1014
 0.1014
 0.0018
 SD
 :
 0.00950
 0.0002

 SD :
 0.00950
 0.00950
 0.0002
 :
 :
 9.4
 9.3787

Stored %RSD: 9.4 9.4 9.3787 Element: Hg Seq. No.: 55 AS Loc.: 4 Date: 06/27/2007 Sample ID: QC Sample 1 \_\_\_\_\_ 

 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 1.943
 1.943
 0.0345
 0.1537
 0.0346
 12:55:37
 No

 2
 1.976
 1.976
 0.0351
 0.1558
 0.0352
 12:56:06
 No

 Mean:
 1.960
 1.960
 0.0348
 0.02347
 0.02347
 0.02044

SD : 0.02347 0.02347 0.0004 %RSD: 1.2 1.2 1.2071 OC value within specified limits. de ede an exe en a constant e a constant e a constant e a constant e a constant e a constant e a constant e a c Element: Hg Seq. No.: 56 AS Loc.: 1 Date: 06/27/2007 Sample ID: QC Sample 2 -ReplSampleConcStndConcBlnkCorrPeakTimePeak#µg/Lµg/LSignalAreaHeightStored10.00890.00890.00020.00180.000312:57:18No

Perkin-Elmer AAWinLab: 06/27/2007, 12:47:51 AM

-0.0064 -0.0064 -0.0001 -0.0015 0.0000 12:57:47 No 0.0012 0.0012 0.0000 0.01083 0.01083 0.0002 2 Mean: SD : 0.01083 0.01083 %RSD: 896.3 896.3 896.1074 QC value within specified limits. Element: Hg Seq. No.: 57 AS Loc.: 49 Date: 06/27/2007 Sample ID: 070622041-005A 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 0.1739
 0.1739
 0.0031
 0.0142
 0.0032
 12:58:58
 No

 2
 0.1838
 0.1838
 0.0032
 0.0161
 0.0034
 12:59:28
 No

 Mean:
 0.1789
 0.1789
 0.0032
 0.0034
 12:59:28
 No

 SD
 0.00695
 0.0001
 8RSD:
 3.9
 3.8872
 Stored Element: Hg Seq. No.: 58 AS Loc.: 50 Date: 06/27/2007 Sample ID: 070622041-006A 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 0.1025
 0.1025
 0.0018
 0.0087
 0.0019
 01:00:37
 No

 2
 0.1067
 0.1067
 0.0019
 0.0088
 0.0020
 01:01:07
 No

 Mean:
 0.1046
 0.1046
 0.0018
 SD
 0.00297
 0.0001

 SD
 2.00297
 0.0001
 2.0001
 2.0001
 2.00001
 8RSD: 2.8 2.8 2.8433 Element: Hg Seq. No.: 59 AS Loc.: 51 Date: 06/27/2007 Sample ID: 070622041-007A 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 0.1720
 0.1720
 0.0030
 0.0155
 0.0032
 01:02:17
 No

 2
 0.1746
 0.1746
 0.0031
 0.0139
 0.0032
 01:02:46
 No

 Mean:
 0.1733
 0.1733
 0.0031
 0.0032
 01:02:46
 No

 SD
 :
 0.00187
 0.0000
 0.0000
 0.00187
 0.0000
 Stored %RSD: 1.1 1.1 1.0814 الأخلط وزحاذ والعاد والمتعاد المتعالم المتعار في المحمد الخطاط في في محمد والحول في من عام المحمد وال Element: Hg Seq. No.: 60 AS Loc.: 52 Date: 06/27/2007 Sample ID: 070622041-007A DP 

 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 0.1215
 0.1215
 0.0021
 0.0107
 0.0023
 01:03:57
 No

 2
 0.1162
 0.1162
 0.0020
 0.0090
 0.0022
 01:04:26
 No

 Mean:
 0.1189
 0.1189
 0.0021
 SD
 :
 0.00373
 0.0001

Stored 3.1 3.1 3.1357 %RSD: Element: Hg Seq. No.: 61 AS Loc.: 53 Date: 06/27/2007 Sample ID: 070622041-007A MS \_\_\_\_\_ ReplSampleConcStndConcBlnkCorrPeakPeakTimePeak#µg/Lµg/LSignalAreaHeightStore11.6491.6490.02920.13570.029401:05:38No21.6591.6590.02940.13600.029501:06:07NoMean:1.6541.6540.0293 Stored

Perkin-Elmer AAWinLab: 06/27/2007, 12:57:47 AM

SD : 0.00714 0.00714 0.0001 0.4 0.4346 %RSD: 0.4 \_\_\_\_\_ Element: Hg Seq. No.: 62 AS Loc.: 54 Date: 06/27/2007 Sample ID: MB-W \_\_\_\_\_ 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 0.0109
 0.0109
 0.0002
 0.0017
 0.0003
 01:07:19
 No

 2
 0.0174
 0.0174
 0.0003
 0.0028
 0.0004
 01:07:48
 No

 Mean:
 0.0142
 0.0142
 0.0002
 SD
 :
 0.00462
 0.0001

 %RSD:
 32.6
 32.6
 32.6282
 :
 :
 .
 Stored والاحداث والمحاوي والمحاوية المتكاف فستتحجج والتنتين والمحدد والجو شن وحدم وجميد وج Element: Hg Seq. No.: 63 AS Loc.: 55 Date: 06/27/2007 Sample ID: LCS-W 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 1.878
 1.878
 0.0333
 0.1489
 0.0335
 01:09:00
 No

 2
 1.910
 1.910
 0.0339
 0.1518
 0.0340
 01:09:29
 No
 Mean: 1.894 1.894 0.0336 SD : 0.02260 0.02260 0.0004 %RSD: 1.2 1.2 1.2027 Element: Hg Seq. No.: 64 AS Loc.: 56 Date: 06/27/2007 Sample ID: 070622047-001F \_\_\_\_\_ 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 0.0448
 0.0448
 0.0008
 0.0041
 0.0009
 01:10:43
 No

 2
 0.0592
 0.0592
 0.0010
 0.0065
 0.0012
 01:11:12
 No

 Mean:
 0.0520
 0.0520
 0.0009
 SD
 :
 0.01023
 0.0002
 Stored %RSD: 19.7 19.7 19.6777 Element: Hg Seq. No.: 65 AS Loc.: 57 Date: 06/27/2007 Sample ID: 070622047-001F DP 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 0.0347
 0.0347
 0.0006
 0.0036
 0.0007
 01:12:25
 No

 2
 0.0469
 0.0469
 0.0008
 0.0052
 0.0010
 01:12:54
 No

 Mean:
 0.0408
 0.0408
 0.0007
 SD
 :
 0.00860
 0.0002
 \$RSD:
 21.1
 21.1
 21.0747
 Stored \_\_\_\_\_ فالتنك وتجاربون والمنصد بمتواص ومعرو ومعرج ويهجر Element: Hg Seq. No.: 66 AS Loc.: 58 Date: 06/27/2007 Sample ID: 070622047-001F MS 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stored

 1
 1.252
 1.252
 0.0222
 0.1093
 0.0223
 01:14:08
 No

 2
 1.248
 1.248
 0.0221
 0.1083
 0.0222
 01:14:37
 No

 Mean:
 1.250
 1.250
 0.0221
 0.0221
 01:14:37
 No
 SD : 0.00287 0.00287 0.0001 %RSD: 0.2 0.2 0.2308

Element: Hg Seq. No.: 67 AS Loc.: 4 Date: 06/27/2007 Sample ID: QC Sample 1 SampleConc StndConc BlnkCorr Peak Peak Time Peak Repl # μg/L μg/L Signal Area Height Stor 1.930 1.930 0.0343 0.1549 0.0344 01:15:51 No Stored 1.930 1 1.966 1.948 1.966 0.0349 0.1572 0.0350 01:16:20 No 2 1.948 0.0346 Mean: SD: 0.02527 0.02527 0.0005 %RSD: 1.3 1.3 1.3071 QC value within specified limits. Element: Hg Seq. No.: 68 AS Loc.: 1 Date: 06/27/2007 Sample ID: QC Sample 2 \_\_\_\_\_ 

 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 0.0088
 0.0086
 0.0002
 0.0017
 0.0003
 01:17:32
 No

 2
 0.0059
 0.0059
 0.0001
 0.0004
 0.0002
 01:18:01
 No

 Mean:
 0.0074
 0.0001
 0.0000
 0.0001
 SD
 0.00210
 0.0000

Stored SD : 0.00210 0.00210 0.0000 %RSD; 28.6 28.6 28.5911 QC value within specified limits. \_\_\_\_\_\_ Element: Hg Seq. No.: 69 AS Loc.: 59 Date: 06/27/2007 Sample ID: 070622047-002F 
 Repl
 SampleConc
 StndConc
 BlnkCorr
 Peak
 Time
 Peak

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Store

 1
 0.0786
 0.0786
 0.0014
 0.0090
 0.0015
 01:19:14
 No

 2
 0.0777
 0.0777
 0.0014
 0.0074
 0.0015
 01:19:43
 No

 Mean:
 0.0781
 0.0781
 0.0014
 0.0015
 01:19:43
 No

 SD
 0.00066
 0.0000
 8RSD:
 0.8
 0.8424
 0.8424
 Stored Element: Hg Seq. No.: 70 AS Loc.: 60 Date: 06/27/2007 Sample ID: 070625007-001F -Repl SampleConc StndConc BlnkCorr Peak Peak Time Peak 

 #
 µg/L
 µg/L
 Signal
 Area
 Height
 Stor

 1
 0.0616
 0.0616
 0.0011
 0.0058
 0.0012
 01:20:57
 No

 2
 0.0637
 0.0637
 0.0011
 0.0070
 0.0012
 01:21:26
 No

 Mean:
 0.0627
 0.0627
 0.0011
 SD
 :
 0.00147
 0.0000

Stored 2.3 2.3466 2.3 %RSD: والمتحكم والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتحد والمتح Element: Hg Seq. No.: 71 AS Loc.: 61 Date: 06/27/2007 Sample ID: 070625007-002F Repl SampleConc StndConc BlnkCorr Peak Peak Time Peak Stored Mean: SD : 0.00062 0.00062 0.0000 &RSD: 0.3 0.3 0.2550

Prep Start Date: Prep End Date:	6/26/2007 9:58:23 6/26/2007 5:00:00				Ċ	Eactor 1	۵.	age:1 of 4
Prep Batch 148;	30 Prep Code:	3010A	Technician: Keith	Hammecker	-	mr/mr	2	
Sample ID	Matrix pŀ	f Res CI	SampAmt	Soi Added	Fin Vol	factor	PrepStart	PrepEnd
070621023-001A	Groundwaler	No	100	0	100	1.000	6/26/2007	6/26/2007
070621023-002A	Groundwaler	Ñ	100	0	100	1.000	6/26/2007	8/26/2007
070621023-003A	Groundwater	0 N	100	0	00	1.000	6/26/2007	8/26/2007
070621023-003AMS	Groundwater	No	100	0	100	1.000	6/26/2007	6/28/2007
070621023-003AMSD	Groundwater	No	100	o	100	1.000	6/26/2007	6/26/2007
070621023-004A	Groundwater	No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-005A	Groundwater	No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-006A	Groundwater	No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-007A	Groundwater	Q	100	D	100	1.000	6/26/2007	6/26/2007
070621023-008A	Groundwaler	No	100	0	100	1.000	6/26/2007	8/26/2007
070821023-009A	Groundwater	No	100	0	100	1.000	6/28/2007	6/26/2007
070621023-010A	Groundwater	No	100	0	100	1.000	8/26/2007	6/20/22007
070621023-011A	Groundwater	No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-012A	Groundwaler	N	100	0	100	1.000	6/26/2007	6/26/2007
070621023-013A	Groundwater	N	100	0	100	1.000	6/26/2007	6/26/2007
070821023-014A	Groundwater	No	100	0	100	1.000	6/26/2007	6/28/2007
070621023-015A	Groundwater	Ŷ	100	D	100	1.000	6/26/2007	6/26/2007
070621023-016A	Groundwater	No	100	0	100	1.000	6/26/2007	6/26/2007

**Adirondack Environmental Services, Inc** 

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Surface Waler Surface Water

070621023-017AMS

070621023-017A

100

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AmtAdd

SampType

Spike Name

mtlcs-w SP060626A MT-SPIKE-Icp-2 HP519215

Spk ID

Reagent Name

1255 Nitric Acid

Number

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9:58:23	5:00:00
6/26/2007	6/26/2007
Start Date:	End Date:
Prep	Prep

Prep Factor Units:

Prep Batch 148	30 Prep Coc	de: 3010	A V	Technician: Keith	Hammecker		mL/mL		
Sample ID	Matrix	Hq	Res Cl	SampAmt	Sol Added	Fin Vol	factor	PrepStart	PrepEnd
070821023-017AMSD	Surface Water		оŇ	100	0	100	1.000	6/26/2007	6/26/2007
070621023-018A	Surface Water		No	100	0	100	1.000	6/28/2007	6/26/2007
070621028-001F	Water		No	100	0	100	1.000	6/26/2007	6/28/2007
070621026-002F	Water		No	100	0	100	1.000	6/26/2007	6/28/2007
070621026-002FMS	Water		No	100	0	100	1.000	6/26/2007	6/28/2007
070621028-002FMSD	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070622013-003A	Waslewater		No	22	0	22	1.000	6/26/2007	6/28/2007
070622013-004A	Waslewaler		No	50	0	50	1.000	6/28/2007	6/28/2007
070622016-005A	Waslewaler		No	50	0	ß	1.000	6/26/2007	0/26/2007
070622016-007A	Waslewaler		No	50	0	50	1.000	8/28/2007	6/26/2007
070822018-008A	Waslewater		No	50	o	50	1.000	6/26/2007	6/26/2007
070822018-001C	Groundwater		No	23	0	20	1.000	6/26/2007	6/28/2007
070622035-001B	Waslewaler		No	50	0	ß	1.000	6/28/2007	6/28/2007
070622037-001C	Waslewaler		No	50	D	50	1.000	6/28/2007	6/26/2007
070622041-001A	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070622041-002A	Water		No	100	0	100	1.000	6/28/2007	6/26/2007
070622041-003A	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070622041-004A	Water		No	100	D	100	1.000	8/28/2007	6/26/2007
070822041-005A	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070622041-006A	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
Number	Reagent Name			Sok ID	Snike	s Name		SamnTvno	AmtAdd
1255 Nitric Ac	'nd			mtlcs-w	SP060626A				0
				MT-SPIKE-icp-2	HP519215		-		
							-	-	,

StopTime

HotBlock/Bath Temp\_\_\_\_\_BathStartTime:

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6/26/2007 9:58:23	6/26/2007 5:00:00
Start Date:	End Date:
Prep	Prep

Prep Factor Units: mL / mL

Prep Batch 146	330 Prep Code	e: 3010	A	Technician: Keith	Hammecker		mL/mL			
Sample ID	Matrix	Hď	Res CI	SampAmt	Sol Added	Fin Vol	factor	PrepStart	PrepEnc	_
070622041-007A	Water		Ñ	100	0	100	1.000	6/28/2007	6/26/2001	
070622041-007AMS	Water		No	100	0	100	1.000	6/26/2007	6/26/200	
070622041-007AMSD	Water		No	100	0	100	1.000	6/26/2007	6/26/200	
070622042-008B	Water		No	50	0	50	1.000	6/26/2007	6/26/2001	
070622042-009B	Water		No	20	0	50	1.000	6/26/2007	6/26/2001	
070622043-001A	Wastewater		No	100	0	100	1.000	6/26/2007	6/26/200	
070822045-0018	Wastewater		Na	20	0	20	1.000	6/26/2007	6/26/200	
070822047-001F	Water		No	50	0	50	1.000	6/26/2007	8/26/200	
070822047-002F	Water		No	50	0	50	1.000	6/26/2007	6/28/200	
070622047-003F	Water		No	50	0	50	1.000	6/26/2007	6/26/2001	
070822081-001C	Drinklng Water		No	50	0	20	1.000	6/26/2007	6/26/2001	
070622063-001D	Wastewaler		No	50	0	22	1.000	6/26/2007	6/26/2007	
070622065-001B	Water		No	50	D	50	1.000	6/26/2007	6/26/2007	
070622065-003C	Surface Water		No	50	0	50	1.000	6/26/2007	6/26/2007	
070825007-001F	Waler		No	100	0	100	1.000	6/26/2007	6/26/2007	.
070825007-002F	Waler		No	100	0	100	1.000	6/26/2007	8/26/2007	
070825009-001B	Groundwater		No	50	0	50	1.000	6/26/2007	6/26/2007	.
070625009-001BDP	Groundwater		No	50	0	50	1.000	6/26/2007	8/26/2007	
070625009-001BMS	Groundwater		No	50	D	50	1.000	6/26/2007	6/26/2007	
070825009-002B	Groundwaler		No	50	0	50	1.000	6/26/2007	6/26/2007	
Number	Reagent Name			Spk ID	Spik	ie Name		SampType	AmtAdd	ß
1255 Nitric A	cld			mtlcs-w	SP060626A				0	
		21		MT-SPIKE-icp-2	HP519215				0	

HotBlock/Bath Temp °C BathStartTime: StopTime

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6/26/2007 9:58:23	6/26/2007 5:00:00
Start Date:	End Date:
Prep	Prep

Prep Factor Units: mL / mL

Prep Batch	14830 P	rep Code: 301	0A	Technician: Keith	Hammecker		mL/mL		
Sample ID	Matrix	Hq	Res CI	SampAmt	Sol Added	Fin Vol	factor	PrepStart	PrepEnd
070625009-003B	Groundwalt	Br	No	50	0	50	1.000	6/26/2007	6/26/2007
070825009-004B	Groundwal	er	No	50	0	50	1.000	6/26/2007	8/26/2007
070625009-005B	Groundwate	Ŀ	No	50	0	50	1.000	6/26/2007	6/26/2007
070625009-006B	Groundwal	er	No	50	D	50	1.000	6/26/2007	8/28/2007
070628027-001B	Waslewate	ar	No	50	0	50	1.000	6/26/2007	6/26/2007
070626027-002C	Waslewale	91	No	50	0	50	1.000	6/26/2007	6/26/2007
070626027-003A	Wastewate	ar	No	50	0	50	1.000	6/26/2007	6/28/2007
070626027-004A	Wastewate	er	No	50	0	50	1.000	6/26/2007	6/26/2007
070626027-004AD	P Waslewate	эг	No	50	0	50	1.000	6/26/2007	6/26/2007
070626027-004AN	AS Westewale	ar	No	50	0	50	1.000	6/28/2007	8/28/2007
LCS-14830			No	100	0	100	1.000	6/26/2007	6/26/2007
MB-14830			No	100	0	100	1,000	8/26/2007	6/26/2007

Number Reagent Name		Spk ID	Splke N	Vame	SampType	AmtAdd	
1255 Nitric AcId	mllo	M-S:	SP060626A			0	
	MT-	SPIKE-icp-2	HP519215			0	
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		Ĭ	olBlock/Bath Temp	ç			
		Ba	alhSlartTime:	StopTime			

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6/26/2007	6/26/2007
Prep Start Date:	Prep End Date:

Prep Factor Units:

Prep Batch 146	111 Prep Code	E HG	PREP	Technician: Keith	Hammecker		אר / שר /		
Sample ID	Matrix	Hq	Res Cl	SampAmt	Sol Added	Fin Vol	factor	PrepStart	t PrepEnd
070821004-001F	Wastewater		٩	50	0	50	1.000	6/26/2007	6/26/2007
070821008-001F	Wastewaler		No	50	0	50	1.000	6/26/2007	6/26/2007
070821007-001F	Westewaler		No	50	o	20	1.000	6/26/2007	6/26/2007
070621023-001A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-002A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070621023-003A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-003AMS	Groundwater		No	100	D	100	1.000	6/26/2007	6/26/2007
070621023-003AMSD	Groundwater		No	100	o	100	1.000	6/26/2007	6/26/2007
070621023-004A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070621023-005A	Groundwater		No	100	Ō	100	1.000	6/26/2007	6/26/2007
070621023-006A	Groundwater		No	100	0	100	1.000	6/28/2007	6/26/2007
070621023-007A	Groundwater		No	100	0	0	1.000	6/26/2007	6/26/2007
070621023-008A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070621023-009A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070621023-010A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070621023-011A	Groundwaler		No	100	0	100	1.000	6/26/2007	6/26/2007
070621023-012A	Groundwater		No	100	0	100	1.000	8/28/2007	6/26/2007
070621023-013A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070621023-014A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070621023-015A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
Number	Reagent Name			Spk ID	Spik	e Name		SampType	AmtAdd
1217 H2SO4	-metals			MTLCSHG-W	SP051013				0
1232 KMnO4				MT-SPIKE-HG	SP060509A				0
1255 Nitric A	cid								
1256 Potassi	um Persulfate-5%-met	als							

HotBlock/Bath Temp\_\_\_\*C BathStartTime:\_\_\_\_\_StopTime\_

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6/26/2007 10:33:57	6/26/2007 5:00:00
Prep Start Date:	Prep End Date:

Prep Faclor Units: mL /

Prep Batch 148	11 Prep Code:	HGF	REP	Technician: Keith	Hammecker		mL/		
Sample ID	Matrix	На	Res CI	SampAmt	Sol Added	Fin Vol	factor	PrepStart	PrepEnd
070621023-016A	Groundwater		°N N	100	0	100	1.000	6/26/2007	8/26/2007
070821023-017A	Surface Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-017AMS	Surface Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070621023-017AMSD	Surface Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-018A	Surface Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070822018-005A	Waslewater		No	50	0	20	1.000	6/26/2007	6/26/2007
070622018-001C	Groundwater		No	50	0	50	1.000	6/26/2007	6/26/2007
070622032-001A	Liquid		No	0.5	o	50	100.000	6/26/2007	8/28/2007
070622032-002A	Llquid		No	0.5	0	20	100.000	6/26/2007	8/26/2007
070822032-003A	Liquid		Ŷ	0.5	0	50	100.000	6/28/2007	6/26/2007
070622041-001A	Water		QN	100	0	100	1.000	6/26/2007	6/26/2007
070622041-002A	Water		No	100	D	100	1.000	6/26/2007	6/26/2007
070622041-003A	Water		No	100	Q	100	1.000	6/26/2007	6/26/2007
070622041-004A	Water		No	100	0	100	1,000	6/26/2007	6/26/2007
070622041-005A	Water		Ŋ	100	0	90	1.000	6/26/2007	6/26/2007
070822041-006A	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070822041-007A	Waler		No	100	0	100	1.000	6/26/2007	6/28/2007
070622041-007AMS	Waler		No	100	0	100	1.000	6/26/2007	6/26/2007
070822041-007AMSD	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070622043-001A	Waslewaler		No	50	0	8	1.000	6/26/2007	6/26/2007
Number	Reagent Name			Spk ID	Spik	e Name	S	ampType	AmtAdd
1217 H2SO4-I	metals			MTLCSHG-W	SP051013				0
1232 KMnO4				MT-SPIKE-HG	SP060509A				0
1255 Nitric Ac	id								
1256 Polassiu	m Persulfate-5%-metals								

Stop Time\_ ပ္ HotBlock/Balh Temp\_\_\_\_\_ BalhStartTime:\_\_\_\_\_\_

Prep Start Date:	6/26/2007 10:3	3:57						۵.	age:3 of 3
Prep End Date:	6/26/2007 5:00	00:				Pr	ep Factor Ui	nits:	
Prep Batch 148	11 Prep Co.	de: HG	PREP	Technician: Keit	h Hammecker		mL /		
Sample ID	Matrix	Hq	Res Cl	SampAmt	Sol Added	Fin Vol	factor	PrepStart	PrepEnd
070822047-001F	Waler		No	100	0	100	1.000	6/26/2007	6/26/2007
070622047-001FMS	Waler		No	100	0	100	1.000	6/28/2007	6/26/2007
070622047-001FMSD	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070822047-002F	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070622061-001C	Drinking Water		No	50	0	50	1.000	6/26/2007	6/26/2007
070822087-001E	Water		No	100	0	100	1.000	6/25/2007	6/25/2007
070622067-001EDP	Water		No	100	0	100	1.000	8/25/2007	6/25/2007
070822067-001EMS	Water		No	100	0	100	1.000	8/25/2007	6/25/2007
070625007-001F	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070625007-002F	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
LCS-14811			No	100	0	100	1.000	6/28/2007	6/26/2007
MB-14811			No	100	0	100	1.000	6/26/2007	6/26/2007

Adirondack Environmental Services, Inc

1217      H2SO4-metals      MTLCSHG-W      SP051013      MAL        1232      KMnO4      MT-SPIKE-HG      SP060509A      1255      Nitric Acid        1256      Potassium Persulfate-5%-metals      1256      Potassium Persulfate-5%-metals      1256	Number	Reanent Name	Shk ID	Chike Name	Same Tures
1217      H2SO4-metals      MTLCSHG-W      SP051013        1232      KMnO4      MT-SPIKE-HG      SP060509A        1255      Nitric Acid      1255      Nitric Acid        1256      Potassium Persulfate-5%-metals      1256      Potassium Persulfate-5%-metals				APING MAILIE	
1232 KMnO4 1255 Nitric Acid 1256 Potassium Persulfate-5%-metals	1217	H2SO4-metals	MTLCSHG-W	SP051013	-
1255 Nitric Acid 1256 Potassium Persulfate-5%-metals	1232	KMnO4	MT-SPIKE-HG	SP060509A	
1256 Potassium Persulfate-5%-metals	1255	Nitric Acid			
	1256	Potassium Persulfate-5%-metals			

00

AmtAdd

HotBlock/Bath Temp °C BathStartTime: StopTime INORGANIC

.

ANALYSIS

1

CONVENTIONALS ANALYSIS DATA SHEET

LAB NAME: Adirono	lack Environmental	CONTRACT:	SW-1-SU-7
LAB CODE: AES	Case No.:	ESE 0701 SAS No.:	SDG No.: SW-1-SU-7
Matrix (soil/wate	r): Water	Lab Sample	ID: 070622041-001
Level (Low/Med):	Low	Date Recei	ved: 6/22/07
<pre>% Solids:</pre>	0.0		

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	с	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 300.0
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				SM18 5310C
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols				EPA 420.1
Chloride				EPA 300.0
Bromide			1	EPA 300.0
Eh				
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 9012
рН	6.8			EPA 150.1
Turbidity	2.4			EPA 180.1
Color			1	EPA 110.2
Hexavalent Chromium				SW 7196

Comments

FORM I - CONV

54 1

1

CONVENTIONALS ANALYSIS DATA SHEET

LAB NAME:	Adirondack Env	vironmental		CONTRACT:		SW-2	-sv–7
LAB CODE:	AES	Case No.:	ESE 0701	SAS No.:	SDG	No.:	SW-1-SU-7
Matrix (so	il/water):	Water		Lab Samp	le ID:	07062	22041-002
Level (Low	/Med):	Low		Date Rec	eived:	6,	/22/07
% Solids:		0.0					

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	С	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 300.0
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				SM18 5310C
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols				EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Eh				
Specific Conductance				EPA 120.1
Cyanide	10	υ		EPA 9012
PH	7.2			EPA 150.1
Turbidity	1.5			EPA 180.1
Color				EPA 110.2
Hexavalent Chromium				SW 7196

Comments

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CONVENTIONALS ANALYSIS DATA SHEET

		CONVENTIONAL	S ANALYSIS	5 DATA SHEET		
LAB NAME:	Adirondack	Environmental		CONTRACT:		S₩-3-SU-7
LAB CODE:	AES	Case No.:	ESE 0701	SAS No.:	SDG	No.: SW-1-5U-7
Matrix (so	il/water):	Water		Lab Sample	ID:	070622041-003
Level (Low	/Med):	Low		Date Recei	ved:	6/22/07
% Solids:		0.0				

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	с	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 300.0
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				SM18 5310C
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols				EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Eh				
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 9012
рН	7.4			EPA 150.1
Turbidity	1.7			EPA 180.1
Color				EPA 110.2
Hexavalent Chromium				SW 7196
				· · · · · · · · · · · · · · · · · · ·

Comments

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CONVENTIONALS ANALYSIS DATA SHEET

LAB NAME:	Adirondack Env	vironmental		CONTRACT:		SW-6	-SU-7	
LAB CODE:	AES	Case No.:	ESE 0701	SAS No.:	SD	G No.:	SW-1-SU-7	
Matrix (so	il/water):	Water		Lab S	Sample II	0706	22041-004	
Level (Low	/Med):	Low		Date	Received	i: 6	/22/07	
% Solids:		0.0						

Concentration Units (ug/L or mg/Kg dry weight): ug/L

\_\_\_\_\_

Analyte	Concentration	с	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N			_	EPA 350.1
Nitrate				EPA 300.0
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				SM18 5310C
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols				EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Eh				
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 9012
рН	7.6			EPA 150.1
Turbidity	5.8			EPA 180.1
Color				EPA 110.2
Hexavalent Chromium				SW 7196

Comments

FORM I - CONV

1

CONVENTIONALS ANALYSIS DATA SHEET

		CONVENTIONAL	LS ANALYSIS	5 DATA SHEET		
LAB NAME:	Adirondack	Environmental		CONTRACT:		S₩-9-SU-7
LAB CODE:	AES	Case No.:	ESE 0701	SAS No.:	SDG	No.: SW-1-SU-7
Matrix (so	il/water):	Water		Lab Samp	le ID:	070622041-005
Level (Low	/Med):	Low		Date Rec	eived:	6/22/07
% Solids:		0.0				

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	С	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 300.0
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				SM18 5310C
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols				EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Eh				
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 9012
pH	7.5			EPA 150.1
Turbidity	2.2			EPA 180.1
Color			_	EPA 110.2
Hexavalent Chromium				SW 7196

Comments

1

CONVENTIONALS ANALYSIS DATA SHEET

LAB NAME:	Adirondack En	vironmental		CONTRACT:		SW-10-SU-7		
LAB CODE:	AES	Case No.:	ESE 0701	SAS No.:	S	DG No.:	SW-1-SU-7	
Matrix (so	il/water):	Water		Lab S	Sample I	D: 070	522041-006	
Level (Low	/Med):	Low		Date	Receive	d: (	5/22/07	
% Solids:		0.0						

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Analyte	Concentration	с	Q	Method
Total Kjeldahl Nitrogen, as N				EPA 351.3
Ammonia, as N				EPA 350.1
Nitrate				EPA 300.0
Chemical Oxygen Demand (COD)				EPA 410.4
Biochemical Oxygen Demand (BOD 5)				EPA 405.1
Total Organic Carbon (TOC)				SM18 5310C
Total Dissolved Solids (TDS)				EPA 160.1
Sulfate				EPA 300.0
Alkalinity				EPA 310.1
Total Phenols			-	EPA 420.1
Chloride				EPA 300.0
Bromide				EPA 300.0
Eh				
Specific Conductance				EPA 120.1
Cyanide	10	U		EPA 9012
рН	7.4			EPA 150.1
Turbidity	2.9			EPA 180.1
Color				EPA 110.2
Hexavalent Chromium				SW 7196

Comments

1

CONVENTIONALS ANALYSIS DATA SHEET

LAB NAME:	Adirondack En	vironmental		CONTRACT:		SW-11	-SV-7
LAB CODE:	AES	Case No.:	ESE 0701	SAS No.:	SDG	No.:	SW-1-SU-7
Matrix (so	il/water):	Water		Lab Sample	ID:	07062	2041-007
Level (Low	/Med):	Low		Date Recei	ved:	6/	22/07
<pre>% Solids:</pre>		0.0					

Concentration Units (ug/L or mg/Kg dry weight): ug/L

Concentration	с	Q	Method
			EPA 351.3
			EPA 350.1
			EPA 300.0
			EPA 410.4
			EPA 405.1
			SM18 5310C
			EPA 160.1
· · · · · · · · · · · · · · · · · · ·			EPA 300.0
			EPA 310.1
			EPA 420.1
			EPA 300.0
			EPA 300.0
			EPA 120.1
10	U		EPA 9012
7.4			EPA 150.1
3.4			EPA 180.1
			EPA 110.2
			SW 7196
	Concentration	Concentration C	Concentration C Q

Comments

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB	NAME :	Adirondack	Environmental		CONTRACT:			
LAB	CODE:	AES	Case No.:	ESE 0701	SAS No.:	SDG No.: SW-1-SU-7		

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units : ug/L

	Init	ial Cal	ibration	Contin	uing Cal	ibration	
Analyte	matra	Deve	8 5		<b>T</b> 1		Method
	TRUE	Found	₹ R	TRUE	Found	₹R	
TKN as N							
Ammonia, as N							
Nitrate							
COD							
BOD 5							
TOC							
TDS							
Sulfate							
Alkalinity							
Total Phenols							
Chloride							
Bromide							
Eh							
Specific Conductance						,	
Cyanide	300	304	101	300	302.	101	EPA 9012
рН							
Turbidity							
Color							
Hexavalent Chromium							

Comments

FORM II (Part 1) - CONV

:00179

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME: Adirondack Environmental CONTRACT: LAB CODE: AES Case No.: ESE 0701 SAS No.: SDG No.: SW-1-SU-7

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units :

ug/L

	Contin	uing Ca	libration	Contin	uing Cal	ibration	
Analyte							Method
	TRUE	Found	% R	TRUE	Found	8 R	
TKN as N							
Ammonia, as N							
Nitrate							
COD							
BOD 5							
TOC							
TDS							
Sulfate							
Alkalinity							
Total Phenols							· · · · · · · · · · · · · · · · · · ·
Chloride							
Bromide							
Eh							
Specific Conductance							
Cyanide	300	301	100	300	301	100	EPA 9012
pH							
Turbidity						_	
Color							
Hexavalent Chromium							

Comments

FORM II (Part 1) - CONV

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB	NAME :	Adirondack	Environmental		CONTRACT:	
LAB	CODE:	AES	Case No.:	ESE 0701	SAS No.:	SDG No.: SW-1-SU-7

ug/L

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units :

Continuing Calibration Continuing Calibration Analyte Method TRUE Found TRUE Found \* R 8 R TKN as N Ammonia, as N Nitrate COD BOD 5 TOC TDS Sulfate Alkalinity Total Phenols Chloride Bromide Eh Specific Conductance Cyanide 300 299 100 300 302 101 EPA 9012 рН Turbidity Color Hexavalent Chromium

Comments

FORM II (Part 1) - CONV

:00181

### 2A

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB	NAME :	Adirondack Env	vironmental		CONTRACT:	
LAB	CODE:	AES	Case No.:	ESE 0701	SAS No.:	SDG No.: SW-1-SU-7

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units : ug/L

	Contir	uing Ca	libration	Contir	nuing Cal	libration	
Analyte	<b>MDITE</b>	<b>T</b> aura 1		_			Method
	TRUE	rouna	<u>* R</u>	TRUE	Found	δ R	
TKN as N	L						
Ammonia, as N							
Nitrate				<u> </u>			
COD							
BOD 5				<u> </u>			
TOC							
TDS					<u> </u>		
Sulfate							
Alkalinity							
Total Phenols							
Chloride				_			
Bromide							
Eh							
Specific Conductance							
Cyanide	300	302	101				
рН							EPA_9012
Turbidity							
Color							
Hexavalent Chromium							
				_			

Comments

FORM II (Part 1) - CONV

2A

## INITIAL AND CONTINUING CALIBRATION VERIFICATION

LAB NAME: Adirondack Environmental CONTRACT:

LAB CODE: AES Case No.: ESE 0701 SAS No.: SDG No.: SW-1-SU-7

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units : ug/L

	Contin	uing Ca	alibration	Conti	nuing Ca	ibration	
Analyte		-			unang ou	LIDIALION	
	TRUE	Found	₹R	TRUE	Found	% R	Method
TKN as N							
Ammonia, as N					<u> </u>		
Nitrate					<u> </u>		
COD	_				┢───		
BOD 5					<u>+</u> −−−		
TOC	_						
TDS					<u>}</u>		
Sulfate							
Alkalinity							
Total Phenols							
Chloride							
Bromide							
Eh					┟───┥		
Specific Conductance							
Cyanide	300	302	101				
PH							EPA_9012
Turbidity							
Color							
Hexavalent Chromium							

Comments

FORM II (Part 1) - CONV

2A

### CRQL STANDARDS FOR CONVENTIONALS

LAB NAME: Adirondack Environmental

CONTRACT:

LAB CODE: AES Case No.: ESE 0701 SAS No.: SDG No.:SW-1-SU-7

Initial Calibration Source:

Continuing Calibration Source:

Concentration Units : ug/L

	Initia	l Calib	ration	Init	ial Calf	ibration	
Analyte							
	TRUE	Found	₩R	TRUE	Found	9 D	Metnod
TKN as N					Tound	0 4	FDA 251 3
Ammonia, as N				<u> </u>			EPA 331.3
Nitrate		┢╾───┥		<u> </u>			EPA 350.1
COD		╂───┤		<u> </u>	<b>{</b> /		EPA 300.0
	<b> </b>	┢╍───┤	——————————————————————————————————————	<b></b>	<b></b>		EPA 410.4
	<u> </u>	<u> </u>	L		<b></b> /		EPA 405.1
TOC		<u> </u>					SM18 5310C
TDS							EPA 160.1
Sulfate							EPA 300.0
Alkalinity							EPA 310 1
Total Phenols					tt		EPD 420 1
Chloride					/───		EPA 420.1
Bromide		l – I	<u> </u>		┢╾──┥		EPA 300.0
Eh							EPA 300.0
Specific Conductance		┣₩			┠────┤		
Specific Conductance							EPA 120.1
Cyanide	10	10.4	104				EPA 9012
рн							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110 2
Hexavalent Chromium							SW 7196

Comments

FORM II (Part 2) - CONV

### 3 BLANKS

LAB NAME:	Adirondack Envir	onmental	CONTRAC	Т:	
LAB CODE:	AES	Case No.: ESE 0701	SAS No.:	SDG No.:	<b>SW-1-SU-</b> 7
Preparatio	on Blank Matrix:	Water			
Preparatio	on Blank Concentra	ation Units: ug/L			

	Initial	Γ	Co	ntin	uing (	ali	bratic	n	Prep.		
	Blank(ug/L)	с	1	С	2	С	3	с	Bla	nk C	Method
TKN as N											EPA 351.3
Ammonia, as N											EPA 350.1
Nitrate				$\Gamma^{-}$							EPA 300.0
COD											EPA 410.4
BOD 5											EPA 405.1
TOC											SM18_5310C
TDS											EPA 160.1
Sulfate					<b>├</b> ──						EPA 300.0
Alkalinity							1				EPA 310.1
Total Phenols											EPA 420 1
Chloride											EPA 300.0
Bromide											EPA 300.0
Eh				<b>I</b>							
Specific Conductance											EPA 120 1
Cyanide	10	U	10	U	10	U	10	U	10	U	EPA 9012
рH											EPA 150 1
Turbidity											EPA 180 1
Color											EPA 110 2
Hexavalent Chromium											SW 7196

Comments

### 3 BLANKS

LAB NAME: Adi	rondack Environme	ntal		CONTRACT:		
LAB CODE:	AES	Case No.: ESE	0701 SAS	No.: 5	SDG No.:	SW-1-SU-7
Preparation Bl	lank Matrix:	Wate	r			
Preparation Bl	ank Concentratio	n Units: ug/	L			

	Initial		Cor	ntin	uing (	Calil	pratic	n	Prep.	
Analyte	lyte Calib.							Blank	Method	
	Blank(ug/L)	С	1	С	2	C	3	С	С	
TKN as N										EPA 351.3
Ammonia, as N										EPA 350.1
Nitrate										EPA 300.0
COD										EPA 410.4
BOD 5										EPA 405.1
TOC										SM18 5310C
TDS										EPA 160.1
Sulfate										EPA 300.0
Alkalinity										EPA 310.1
Total Phenols										EPA 420.1
Chloride										EPA 300.0
Bromide										EPA 300.0
Eh										
Specific Conductance					-					EPA 120.1
Cyanide			10	U	10	U	10	U		EPA 9012
рH										EPA 150.1
Turbidity										EPA 180 1
Color										EPA 110.2
Hexavalent Chromium								,		SW 7196

Comments

FORM III ~ CONV

:00185

5

SPIKE SAMPLE RECOVERY

LAB NAME: Adirondack Environmental CONTRACT: LAB CODE: AES Case No.: ESE 0701 SAS No.: SDG No.: SW-1-SU-7 Matrix (soil/water): Water Level (Low/Med): Low % Solids: 0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

_	Control	Spiked							
Analyte	Limit	Sample		Sample		Spike			1
	% R	Result (SSR)	С	Result (SR)	с	Added (SA)	& R		м
TKN as N			T T		T	(		- ×	
Ammonia, as N									
Nitrate			t						
COD								$\vdash$	<u> </u>
BOD 5									<u> </u>
TOC							<u> </u>	$\vdash$	<u> </u>
TDS									
Sulfate				<u> </u>			—		
Alkalinity									
Total Phenols									
Chloride				<u> </u>					-
Bromide				·					
Eh									
Specific Conductance								<b>—</b>	
Cyanide	75-125	92		10	π	100	87		
PH					Ť		_ 52		
Turbidity									
Color									
Hexavalent Chromium									

Comments

FORM V (Part 1) - CONV

## 6

### DUPLICATES

LAB NA	AME: 7	Adirondack	Environmental	C	CONTRACT:	SI	₩-11-SU-7
LAB CO	ODE:	AES	Case No.:	ESE 0701	SAS No.:	SDG No.	: SW-1-SU-7
Matrix	x (soi	l/water):	Water		Level (Low/Med):		Low
🖁 Soli	ids fo	or Sample:	0.0		% Solids for Dup!	licate:	0.0

Concentration Units (ug/L or mg/Kg dry weight): ug/L

	Control				_			
Analyte	Limit							
	₩ R	Sample (S)	С	Duplicate (D)	с	₩ R	0	м
TKN as N							¥.	
Ammonia, as N						<b>—</b> ——		
Nitrate				······································	<u> </u>	<b> </b>		
COD								
BOD 5								
TOC						F		
TDS								
Sulfate								
Alkalinity								
Total Phenols								
Chloride								
Bromide						————		
Eh								
Specific Conductance								
Cyanide	20	10	υ	10	υ	NC		
рН	20	7.36		7.39		0.4		
Turbidity	20	3.4		3.6		5.7		[
Color								
Hexavalent Chromium								———————————————————————————————————————

Comments

7

LABORATORY CONTROL SAMPLE

LAB	NAME :	Adirondack	Environmental	CONTRACT :			
LAB	CODE:	AES	Case No.:	ESE 0701	SAS No.:	SDG:	SW-1-SU-7

Aqueous LCS Source:

Solid LCS Source:

## Concentration Units : ug/L

	Aqueous (ug/L)			Solid (mg/Kg)					
Analyte			borrd (mg/ng/						
	TRUE	Found	₹ R	TRUE	Found	С	Lim	its	₹R
TKN as N									
Ammonia, as N					<u> </u>				<b> </b>
Nitrate					<u> </u>	1		_	┢──────
COD									
BOD 5		F					┝───╁	_	
TOC						╉──			
TDS					<u> </u>		┝───╂	_	
Sulfate							┝╼─╂		
Alkalinity							┝───╂	_	
Total Phenols									
Chloride							┝───╉		
Bromide									
Eh							┝────╋	_	
Specific Conductance								_	
Cyanide	50 <b>9</b>	478	94			$\vdash$			
рH	6.32	6.39	101						
Turbidity	1.0	1.0	100					_	
Color									
Hexavalent Chromium									

Comments

RAW QC

DATA

# CH 0705

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### Adirondack Environmental Services. Inc. 314 North Pearl Street Albany, NY 12207

SAMPLE ID ============	CHANNEL #2 <u>AMMENIA</u> Cyanide
	1.00
	1,00
	1.00
	1.00
	1.00
	1.00

1.00

1.00

1.00

498.73 (

499.3B

399.57

201.94

101.21

49.33

429.90

100.82

100.71

304.12

-0.11

10.36

9.90

m in

500.0 PPB 500.0 PPB 400.0 PPB 200.0 PPB 100.0 PPB 50.00 PPB 10.00 PPB 500.0 PPB

100.0 PPB ICV 300 PPB

ICB

CRDL 10 PPB

PB 07/02/07 LCS 07/02/07 0.06 478.50 1 - 93 16 : 00190 ~

# Page No. 07/05/07

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Adirondack Environmental Services, Inc. 314 North Pearl Street Albany, NY 12207

SAMPLE ID	CHANNEL #2
CCV 300 PPB	302.33
ССВ	-0.02
EAR 0622041-1	0.57
EAR 0622041-2	-0.01
EAR 0622041-3	-1.58
EAR 0622041-4	-0.47
EAR 0622041-5	-0.66
EAR 0622041-6	-0.82
EAR 0622041-7	-1.77
MOR 0626005-4	-0.05
EAR 0622041-7DP	-0.24
EAR 0622041-75K	92.41
CCV 300PPB	301.07
CCB	-0.58
MOR 0626005-5	~0.51
MOR 0626005-6	-0.45
SUN 0629062-1400	-0.31
SUN 0629064-1	-1.10
ENV 0629046-1	2.66
ENV 0629047-1	2.74
ENV 0629041-1	-0.56
ENV 0629031-1	16.24
PB 07/03/07	-0.16
LCS 07/03/07	500.03

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Adirondack Environmental Services, Inc. 314 North Pearl Street Albany, NY 12207

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SAMPLE ID	· CHANNEL #2 AMMONIA
==================	
CCV 300PPB	301.35
CCB	-0.61
PAR 0702031-4	0.76
ENV 0629030-1	36.49
WAT 0702035-1	-1.00
PAR 0702031-1	-0.93 🗸
FIN 0627055-6	-1.40
FIN 0627055-8	-0.63
FIN 0627055-6W	6.86
FIN 0627055-8W	-0.77
NYD 0622009-6DP	35.78
NYD 0622009-65K	123.44
CCV 300PPB	299.15
ССВ	-0.85
ONT 0629044-1	0.47
CLE 0702025-1	68.68
IPT 0626040-1	-0.69
CLO 0628043-1	3.14
CLD 0628043-2	5.90
CLO 0628043-3	-0.57
CLD 0628043-4	3.11
VOO 0629040-1	0.70
PB 07/05/07	-0.68
LCS 07/05/07	499.91

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Page No. 07/05/07 4

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Adirondack Environmental Services, Inc. 314 North Pearl Street Albany, NY 12207

SAMPLE ID ============	. CHANNEL #2 AMMONIA				
CCV 300PPB	302.09				
ССВ	-0.76				
IPT 0626040-2	0.32 🗸				
IPT 0626040-3	-1.20				
MOR 0628038-1	-0.41				
MOR 0628038-2	-0.43				
MOR 0628038-3	0.16				
MOR 0628038-4	-0.62				
MOR 0628038-5	-0.78V				
MOR 0628038-6	-0.16				
CCV 300PPB	302.16				
CCB	-0.78				
200.0 PPB	201.05				
500.0 PPB	497.38				

•	•					•			
	-								
	•								
)				Technicon TRAACS 8	00 System E	ditor			
Goto -	>	000					Third	d Screen	
Cuo#	Peak# 1	Count	Тур	e Sample ID	Weicht	Dilution	Spike -	•	
1	1	4	P	500.0 PPB	1.000000	1.000000	N		
2	3	1	·C	400.0 PPB	1.000000	1.000000	N		
ত	4	2	۲C	200.0 PPB	1.000000	1.000000	N		
4	5	3	С	100.0 PPB	1.000000	1.000000	<u>م</u> ا		
5	6	1	С	50.00 PPB	1.000000	1.000000	14 NI		
	7	1	Ċ	10.00 PPB	1 000000	1 000000	رم ار		
7	11	1	ŝ	ICV 300 PPB	1 000000	1.000000	114		
B	12	1	ŝ	ICB	1 000000	1.000000			
5	1.3	1	ŝ	CRDI 10 PPB	1 000000	1.000000	IN N		
10	14	1	ğ	PR 07/02/07	1.000000	1.000000	IN N		
11	15	1	6		1.0000000	1.000000	N .		
11	1.0		0	EC8 07702707	1.000000	2.000000	N		
12	16	1	5	CCV 300 PPB	1.000000	1.000000	N		
13	1/	1	5	CCB	1.000000	1.000000	N		
14	18	1	S	EAR 0622041-1	1.000000	1.000000	N		
15	19	1	S	EAR 0622041-2	1.000000	1.000000	N		
16	20	1	S	EAR 0622041-3	1.000000	1.000000	N		
17	21	1	S	EAR 0622041-4	1.000000	1.000000	N		
18	22	1	S	EAR 0622041-5	1.000000	1.000000	N		
19	23	1	S	EAR 0622041-6	1.000000	1.000000	N		
20	24	1	S	EAR 0622041-7	1.000000	1.000000	N		
Sample	id for	• the	SDec	-ified cup	20000000	11000000			
	20 (0) 2 Ede		Bac	$\mathbf{F}$ / $\mathbf{F}$ / $\mathbf{F}$ / $\mathbf{F}$			0 070		
1 0000			ive a		9 WI: 11 / 50	up e sc ar	I Y DIR	0 ConDel	
3				Taskaina TRAARD OF					
		~~~		reconicon (RAALS 80	10 System Ed	litor			
50to -	->	000	_				Third	Screen	
Cup#	Peak# C	jount	Type	e Sample ID	Weight	Dilution	Spike		
21	25	1	S	MOR 0626005-4	1.000000	1.000000	N		
22	26	1	S	EAR 0622041-7DP	1.000000	1.000000	N		
23	27	1	S	EAR 0622041-7SK	1.000000	1.000000	N		
24	28	1	S	CCV 300PPB	1.000000	1.000000	N		
25	29	1	S	CCB	1.000000	1.000000	N		
26	30	1	S	MOR 0626005-5	1 000000	1 000000	NI NI		
27	31	1	G	MOR 0626005-6 amil	1 000000	1.000000	IN N		
70	30	1	ē		1.000000	1.000000	N .		
20		1	5	SUN 0/200/4 4	1.000000	1.000000	N		
27	دن م ح	Ţ	5	50N 0629064-1	1.000000	1.000000	N		
30 	<u>4</u>	1	5	ENV 0629046-1	1.000000	1.000000	N		
31	35	1	S	ENV 0629047-1	1.000000	1.000000	N		
32	36	1	S	ENV 0629041-1	1.000000	1.000000	N		
33	37	1	S	ENV 0629031-1	1.000000	1.000000	N		
34	38	1	S	PB 07/03/07	1.000000	1.000000	N		
35	39	1	S	LCS 07/03/07	1.000000	2.000000	N		
36	40	1	S	CCV JOOPPB	1.000000	1.000000	N		
37	41	5	S	CCB	1.000000	1 000000	N		
38	47	1	s	PAR 0702031-4	1 000000	1 000000	51		
	43	1	ŝ	ENV 0628030-1	1 000000	1.0000000	INF KI		
40	44	+	G	LAT 0702035-1	1 000000	1.000000	N N		
Sample		+		ified over	1.000000	1.000000	N.		
1 Carnolle	- 70 - 101. - 101	na Z P	spec Da-						
1 CODY	7 E00	ie ù f	162	+	Wr Ti / Sc	Up 8 5c dn	9 DIR	0 ConDel	
	•			· · ·					
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·	~	000		lechnicon	IRAACS	800 System	Editor		
		Coust	т	0				Third	i Screen
2004	reak#	1	 	BAD ATAT	3 IU N74 4	Weight	Dilution	Spike .	
41	40	4	0 C	FHR 07020	/31-1	1.000000	) 1.000000	N	
42	40	1		- FIN 06270 - FIN 04970	100-6	1.000000	1.000000	N	
43	·+/ //O	1	,J C	FIN 06270	100-8 Nee (14	1.000000	1.000000	N	
44	45	1 4	 	FIN 06270	100-6W	1.000000	1.000000	N	
40	47	1	5	FIN 06270	122-BM	1.000000	1.000000	N	
46	50	1	5	NYD 06220	109-6DP	1.000000	1.000000	N	
47	51	1	5	NYD 06220	109-65K	1.000000	1.000000	N	
48	02 57	1	5	CCV 300PF	'B	1.000000	1.000000	N	
47		1	5			1.000000	1.000000	N	
30	04 55	1	5	UN1 06290	44-1	1.000000	1.000000	N	
51	55	1	5	LLE 07020	25-1	1.000000	1.000000	N	
J∠ 57	26	1. *	5	IPT 06260	40-1	1.000000	1.000000	N	
	57	1	5	CLU 06280	43-1	1.000000	1.000000	N	
' 54 EE	58	1	5	CLU 06280	43~2	1.000000	1.000000	N	
55	27	1	5	CLU 06280	43-3	1.000000	1.000000	N	
56	60	1	S	CLO 06280	43-4	1.000000	1.000000	N	
57	61	1	S	VOO 06290	40-1	1.000000	1.000000	N	
58	62	1	S	PB 07/05/	07	1.000000	1.000000	N	
59	63	1	5	LCS 07/05	/07	1.000000	2.000000	N	
_ 60	64	1	S	CCV 300PP	В	1,000000	1.000000	N	
Sample	id fo	r the	spec:	ified cup					
1 Copy	2 Ed	one 3	Res (	E 4 Exit	5 Rd fi	6 Wr fi 7 9	Sc Up <mark>8 Sc</mark> dn	9 DIR	0 ConDel
) (			_						
			-	Technicon	TRAACS 8	300 System 1	Editor		
Goto	->	000	_	_				Third	Screen
Cup# F	Peak# ∣	Count	Type	Sample	ID	Weight	Dilution	Spike	
61	65	1	5	CCB		1.000000	1.000000	N	
62	66	1	5	IPT 06260	40-2	1.000000	1.000000	N	
د6	67	1	5	IPT 06260-	40-3	1.000000	1.000000	N	
64	68	1	S	MOR 06280	38-1	1.000000	1.000000	N	
65	69	1	5	MOR 06280;	38-2	1.000000	1.000000	N	
66	70	1	S	MOR 06280	38-3	1.000000	1.000000	N	
6/	/1	1	5	MOR 06280	38-4	1.000000	1.000000	N	
68	72	1	S	MOR 06280	38-5	1.000000	1.000000	N	
69	73	1	S	MOR 06280;	38-6	1.000000	1.000000	N	
70	74	1	5	CCV 300PP	3	1.000000	1.000000	N	
71	75	1	S	CCB		1.000000	1.000000	N	
72						1.000000	1.000000	N	
73						1.000000	1.000000	N	
74						1.000000	1.000000	N	
75						1.000000	1.000000	N	
76						1.000000	1.000000	N	
77						1.000000	1.000000	N	
78						1.000000	1.000000	N	
79						1.000000	1.000000	N	
80						i.000000	1.000000	N	
Sample	id for	the the	speci	fied cup			-		
1 Copy	2 Eda	ne 3 I	Res E	4 Exit 5	Rd fi	6 Wr fi 7 S	c Up 8 Sc dn	9 DIR	0 ConDel

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Int minimum: 0%, maximum 100% Active analyses: 2



Commont .





Time: 13:22; Date: 07-05-107 Operator: SNH

Comment:

Channels	2
Base:	70
)in:	28

cyanide uq/l Base drift correction made Carryover correction made Gain drift correction made Init base 114

			V-44
PK	. 2.UH	' 1 typ C	499.4 '
PK	S CF	' _2 typ C	379.6 \
PK	: 4 CF	) 3 typ C	201.9 \
РK	5 CF	4 typ C	101.2 N
PK	6 CP	5 typ C	49.33
	Ŋ 7 CP	6 typ C	9,901 M ()
t	' 8 CP	1 tvo H	477.9
PK	9 CP	4 typ L	100.8
PK	10 CP	4 typ E	100 7
- BM	11 CP	7 typ e	304 1
			004.1 0 1074 M
PK	12 CP	8 typ 5	-0.1074 M
PK	13 CP	Υ τγρ 5	10.36 M
PK	14 CP	10 typ S	0.05759 M
PK	15 CP	11 typ 5	237.2
PΚ	16 CP	12 typ S	302.3
ΡK	17 CP	13 tvp S	-0.01603 M
ΡK	18 CP	14 tyo S	0.5685 M
PK	17 CP	15 typ S	-0.01200 M
ΡK	20 CP	- 16 tvp S	-1.583 M
PK	21 CP	17 tvp S	-0-4731 M
PK	22 CP	18 tvo S	-0 4581 M
PK	27 09	10 typ 0	-0.8343 M
DM	20 CF		-0.8242 M
EN DM	24 LF 25 CP	20 typ 5	-1.774 M
	20 LF	ZI TYP S	-0.04697 M
PK	26 UP	22 tyo 8	-0.2413 M
PK	27 CP	23 typ S	92.41
PΚ	28 CP	24 typ S	301.1
ΡK	29 CP	25 typ S	-0.582i M
PК	30 CP	26 typ S	-0.5059 M
ΡK	31 CP	27 typ S	-0.4518 M
ΡK	32 CP	28 tvo S	-0.3067 M
)	33 CP	29 tvp 5	-1.104 M
₽K	34 CP	30 tvo S	7 454 M
PK	75 CP	31 typ 6	2:000 H
DV	34 68		2:/40 11 0 550/ W
EN DV	30 LF	JZ TYD S	-0.0094 (1
PK.	UP /د	33 TYD 5	16.24
PK	38 CP	34 typ S	-0.1582 M
PΚ	39 CP	35 typ S	250.0
ΡK	40 CP	36 typ S	301.3
PΚ	41 CP	37 typ S	-0.6121 M
ΡK	42 CP	38 typ S	0.7610 M
PΚ	43 CP	39 typ S	36,49
PΚ	44 CP	40 typ S	-1.003 M
PK	45 CP	41 typ S	-0.9302 M
PΚ	46 CP	42 tvp S	-1.404 M
РK	47 CP	43 tvp S	-0.6263 M
PK	48 CP	44 typ 5	6.861 M
PK	49 CP	45 typ S	-0 7739 M
PK	50 CP		35 70
PK -	50 CF 51 CP	47 typ 5	497 A N
51A		47 LYP 3	123.4 N
TIN DIA	52 LF 57 CD	48 typ 5	277.2 N
TN DIA	53 LP	47 typ 5	-0.8540 M
- K. 594	34 CP	30 TYD 5	0.4660 M
TK.	55 CP	31 typ S	68.68
PK	56 CP	52 typ S	-0. <b>6</b> 894 M
РK	57 CP	53 typ S	3.138 M
	58 CP	54 tvo S	5.898 M
R.	59 CP	55 tvo S	-0.5454 M
214	60 CP	56 tvo S	X 114 M
≥¥.	61 CP	57 tvo S	0 7074 M
212	67 CP	50 tva 0	-0 4704 M
÷Ŕ	63 CP	59 tvp 5	250.0
ΥK	64 ĈP	60 tvo S	30žlí
ΥK	65 CP	61 tvp S	-0.7603 M
31.4			

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PK.	68	,CP	64	typ	s		-0.4085	M			
ΡK	69	CP	65	typ	5		-0.4318	М	`		
ΡK	70	ÇΡ	66	typ	S		0.1811	Μ	*		
ΡK	71	CP	67	typ	S		-0.6206	Μ			
PK	72	-CP	68	typ	S		-0.7766	Μ			
F 7	73	CP	69	typ	S	-	-0.1614	Μ			
1. J	74	CP	70	typ	S		302.2				
FΚ	75	CP	71	typ	S	-	-0.9830	Μ			
ΡK	76	CP	3	typ	I		201.1				
FΚ	77	CP	· 1	typ.	G		499.4	N			
	Last	t Ба	ase				120				
-		_ 4.									
Sam	ple	Sta	atist	:165							
An	al i	leve	91	CUDS	1		avq		std dev	(	=v
	1	al	1	65			49 84		104	2	001/
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Chart saved to file B:CN0705.CHR.

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text file B:CN0705.TXT has been saved to disk.

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EARM     Science     12       PH     Cho P     1       Struepole     PH     Cho P       622041-1     Sw-1     68       222     72     1       333     7.21     1       46     7.6     1       59     7.5     1	2 V 12 4 0-14 00 07B
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622041-18w-1     68       222     72       33     7.21       46     7.6       59     7.5	
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3         3         7.2/           4         6         3.6           5         9         7.6	
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primple IV	TUR	B. (NTU)	12:40-1
622041-1500-1	2,4		
3 3	1,7		
4 6	5,8		
6 10	2.2		
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