



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

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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 ¼ 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), sodium (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 non-detectable 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**

<u>Sample</u>	<u>Metal (Concentration)</u>	<u>Lowest Effect Level</u>	<u>Severe Effect Level</u>
SD-5-SU-05-18"	Antimony (68.5 mg/kg)	2.0 mg/kg	25.0 mg/kg
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)	2.0 mg/kg	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)	16.0 mg/kg	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 Source	Transport Medium	Exposure Point
Groundwater	Groundwater	On-site construction workers
Stormwater and/or Leachate	Stormwater and/or Groundwater	Pedestrian trespassers; On-site construction workers
	Sanitary sewer	Sewer worker
Surface and Subsurface Ash	Ash-Solid Media	Pedestrian 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.

- Subsurface Investigations at the Adjacent ANC Property: 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).
- Supplemental Boquet River Sediment Sampling: 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.
- Boquet River Surface Water Sampling: 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

<u>Sample</u>	<u>Location</u>	<u>Depth</u>
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

- **Background Soil Sample Results:** 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.
- **Black Ash Media Sample Results:** 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.
- **Initial ANC Property Black Ash Sample Results:** 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**

<u>Sample</u>	<u>Metal (Concentration)</u>	<u>Lowest Effect Level</u>	<u>Severe Effect Level</u>
<u>Supplemental SI Results</u>			
SD-11-SU-07-6"	Antimony (4.9 mg/kg)	2.0 mg/kg	25.0 mg/kg
<u>Initial SI Results</u>			
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

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 waters, especially the most upstream 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.

INITIAL SI QUALITATIVE ASSESSMENT

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

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.

SUPPLEMENTAL SI QUALITATIVE ASSESSMENT

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

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.

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

<u>Sample</u>	<u>Metal (Concentration)</u>	<u>Lowest Effect Level</u>	<u>Severe Effect Level</u>
<u>Supplemental SI Results</u>			
SD-11-SU-07-6"	Antimony (4.9 mg/kg)	<u>2.0 mg/kg</u>	25.0 mg/kg
<u>Initial SI Results</u>			
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 Qualitative Human Health Risk Assessment Summary

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

Test Trench Soil Samples

Volatiles Organic Compounds	NYSDEC RSCOs (ppb)	SAMPLES 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
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-xylene		<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
cyclohexane		<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

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

Test Trench Soil Samples

Semi-Vol. Organic Compounds	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
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

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

Test Trench Soil Samples

Semi-Vol. Organic Compounds	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
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

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

Test Trench Soil Samples

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

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

Test Trench Soil Samples

Metals (mg/kg)	East US Site Background (SB)	NYSDEC RSCOs	Background BG1-S-05-12	TT-2-3-05-72	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
aluminum	33,000	SB	9030	6110	922	2170	710	2940	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	25.7	17	27.4	18.9	18.8	48.2	19.2	85.2
beryllium	0 - 1.75	0.16 or SB	0.12	<0.13	<0.32	<0.18	<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	0.23	0.33	0.41	0.31	<0.051	<0.05	0.15	<0.08
calcium	130 - 35,000	SB	2420	91900	1980	353000	1940	147000	260000	4960	296000	349000	5720
chromium	1.5 - 40	10 or SB	7.8	10.4	4.9	4.7	3.6	6.2	2.5	7	12.9	2	21.2
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	12.4
copper	1 - 50	25 or SB	1.8	1.6	3.3	2.9	3.4	7.7	1.8	<0.51	9.5	<0.77	15.5
iron	2,000 - 555,000	2,000 or SB	9840	7840	982	1120	1100	1550	865	8030	13100	749	70400
lead	4-61r; 200-500 u	SB	<0.63	<0.90	11.5	6.5	2.4	6.2	2.9	<0.71	<0.65	1.1	<1.1
magnesium	100 - 5,000	SB	1500	2070	158	2390	598	1120	888	2150	3790	1140	1530
manganese	50 - 5,000	SB	212	125	37.8	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	<0.11	<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	358	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	2460	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	7.5	8	28.7	76.3	7	11.4	62.3	22.2
zinc	9 - 50	20 or SB	23.4	22.6	97.8	17.2	75.1	100	28.7	16.7	217	6.3	104
cyanide (mg/kg)			<0.11	<0.13	<0.38	<0.19	<0.26	<0.36	<0.23	<0.097	<0.099	<0.16	<0.16

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

Soil Boring Subsurface Soil Samples

Volatle Organic Compounds	NYSDEC RSCOs (ppb)	SAMPLES 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	<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
benzene		<25	<18	<12	<11	<17	<21
trans-1,3-dichloropropene		<25	<18	<12	<11	<17	<21
bromoform		<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
toluene		<25	<18	<12	<11	<17	<21
chlorobenzene		<25	<18	<12	<11	<17	<21
ethylbenzene		<25	<18	<12	<11	<17	<21
styrene		<25	<18	<12	<11	<17	<21
m,p-xylenes		<25	<18	<12	<11	<17	<21
o-xylene		<25	<18	<12	<11	<17	<21
methyl t-butyl ether		<25	<18	<12	<11	<17	<21
dichlorodifluoromethane		<25	<18	<12	<11	<17	<21
methyl acetate		<25	<18	<12	<11	<17	<21
freon 113		<25	<18	<12	<11	<17	<21
trichlorofluoromethane		<25	<18	<12	<11	<17	<21
cyclohexane		<25	<18	<12	<11	<17	<21
methylcyclohexane		<25	<18	<12	<11	<17	<21
1,2-dibromoethane		<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

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

Soil Boring Subsurface Soil Samples

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

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

Soil Boring Subsurface Soil Samples

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	61	<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		<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

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

Soil Boring Subsurface Soil Samples

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

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

Soil Boring Subsurface Soil Samples

Metals (mg/kg)	East US Site Background (SB)	NYSDEC RSCOs	SAMPLES 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	138000	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	7	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

Groundwater Samples

Volatile Organic Compounds	Groundwater Samples							
	Class GA Stds.	Upgradient Well MW-2	Downgradient Well MW-1	Downgradient Well MW-3	Downgradient Well MW-4	Downgradient Well MW-5	Downgradient Well MW-6	Downgradient Well MW-7
chloromethane		<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,p-xylenes		<10	<10	<10	<10	<10	<10	<10
o-xylene		<10	<10	<10	<10	<10	<10	<10
methyl t-butyl ether		<10	<10	<10	<10	<10	<10	<10
dichlorodifluoromethane		<10	<10	<10	<10	<10	<10	<10
methyl acetate		<10	<10	<10	<10	<10	<10	<10
freon 113		<10	<10	<10	<10	<10	<10	<10
trichlorofluoromethane		<10	<10	<10	<10	<10	<10	<10
cyclohexane		<10	<10	<10	<10	<10	<10	<10
methylcyclohexane		<10	<10	<10	<10	<10	<10	<10
1,2-dibromoethane		<10	<10	<10	<10	<10	<10	<10
1,3-dichlorobenzene		<10	<10	<10	<10	<10	<10	<10
isopropylbenzene		<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

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

Groundwater Samples

[illegible]

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

Groundwater Samples

[illegible]

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

Groundwater Samples

[illegible]

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

Groundwater Samples

Metals (ug/L)	Class GA Stds.	Upgradient Well MW-2	Downgradient Well MW-1	Downgradient Well MW-3	Downgradient Well MW-4	Downgradient Well MW-5	Downgradient Well MW-6	Downgradient Well MW-7
aluminum		2810	37100	1250	6720	32300	44000	132
antimony	3	31.3	22.3	<16.5	39.8	109	29.8	32.8
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	0.54	<0.40
cadmium	5	<0.20	<0.20	<0.20	<0.20	1.7	<0.20	<0.20
calcium		90500	175000	172000	270000	256000	1740000	54300
chromium	50	4.5	60.6	<2.3	12.2	47.2	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	79	<2.0
iron	300	4660	55500	2950	14800	36900	63500	2030
lead	25	<2.8	<2.8	<2.8	9.9	32	106	<2.8
magnesium	35000	31900	31700	39400	26800	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	44.7	<3.7
potassium		7060	14000	10900	9230	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	39700	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
pH	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	14

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

River Sediment Samples

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
vinyl 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	9bj	11j	9bj	<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-dichloropropane	<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
benzene	<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-hexanone	<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-xylenes	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
o-xylene	<11	<12	<13	<11	<12	<12	<13	<13	<13	<13	<12	<11
methyl t-butyl 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
freon 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
isopropylbenzene	<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

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River Sediment Samples

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

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River Sediment Samples

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

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

River Sediment Samples

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	<2.1	<2.1	<1.8	<2.0	<2.1	<2.1	<2.1	<2.1	<2.2	<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

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

River Sediment Samples

Metals (ug/L)	Guidance Lowest Effect Level (ppm)	Guidance Severe Effect Level (ppm)	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
aluminum			2160	2240	1530	2290	1810	1750	1950	2240	2160	2810	1680	1700
antimony	2	25	<3.5	<4.1	<4.2	7.2	<4.0	<4.1	16.5	<4.2	<4.0	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	9	5.4	14.5	7.2	5.3	6.9	8.6	7.4	9.4	6	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	941	1130	1970	2950	1280	2400	1270	1220	2070	1870
chromium	26	110	3	1.1	1.9	1.4	<0.56	2.5	1.7	2.9	2.5	4.4	2.3	1.1
cobalt			2.4	1.8	1.5	2.5	1.8	1.5	2.1	2.2	2.2	2.8	1.8	1.7
copper	16	110	<0.43	<0.49	0.62	0.67	0.66	<0.50	0.59	0.71	0.92	0.62	<0.48	15.4
iron	20000	40000	5590	4200	3640	8360	4360	3810	4910	5660	5170	8030	4010	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	7.5
magnesium			1700	1170	687	1100	1390	1750	1220	1440	1070	1390	737	640
manganese	460	1100	86.6	73.1	49.7	113	48.6	44.4	54.8	70.1	59.8	79.7	50.3	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	1.9	1.5	<0.79	1.5	1.8	1.9	2.7	2.5	16.6	1.9	0.97
potassium			72.3	104	44.1	164	122	54.6	57.2	71.2	72.5	55	52.5	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	184	199	151	200	193	203	203	243	247	112	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	3.8	3.2	4.7	3.8	3.2	3.9	4.3	4.1	6.4	3.6	2.8
zinc	120	270	16	9.2	10.2	17.9	10.6	7.4	12.4	13	15.1	15.8	11.3	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

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

Waste Media Solid Samples

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
chloromethane		<88	<23	<18	<18	<20	<21	<18
bromomethane		<88	<23	<18	<18	<20	<21	<18
vinyl chloride		<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
benzene		<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-hexanone		<88	<23	<18	<18	<20	<21	<18
terachloroethene		<88	<23	<18	<18	<20	<21	<18
1,1,2,2-tetrachloroethane		<88	<23	<18	<18	<20	<21	<18
toluene		<88	<23	<18	<18	<20	<21	<18
chlorobenzene		<88	<23	<18	<18	<20	<21	<18
ethylbenzene		<88	<23	<18	<18	<20	<21	<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
1,2,4-trichlorobenzene		<88	<23	<18	<18	<20	<21	<18

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

Waste Media Solid Samples

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

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

Waste Media Solid Samples

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

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

Waste Media Solid Samples

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

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

Waste Media Solid Samples

Metals (mg/kg)	East US Site Background (SB)	NYSDEC 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	<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	55	37.2	50.7	74
beryllium	0 - 1.75	0.16 or SB	1.6	<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	<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	522	205
cyanide (mg/kg)			0.28	<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)

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

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
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	1.6
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	3.3
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	7.4
turbidity		2.4	1.5	1.7	5.8	2.2	2.9	3.4

Black Ash Pond - ERP: Site Investigation Analytical Data Summary

Sediment Samples - SUPPLEMENTAL SI

Metals (ug/L)	Guidance Lowest Effect Level (ppm)	Guidance Severe 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	<0.13	<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	<0.47	<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 Background (SB)	NYSDEC RSCOs	Background BG1-S-05-12	TT-11 WM-1-SU-07-10	TT-7 WM-2-SU-07-6	TT-4 WM-3-SU-07-9	TT-24 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	4-61; 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

SHEET 1

SHEET 2

N.Y.S. GRID NORTH
1927 DATUM

MAGNETIC NORTH 1986
REFERENCE MAP #2

SITE INVESTIGATION REPORT BLACK ASH POND

TOWN OF VILLSBORO

ESSEX COUNTY NEW YORK

ESE

Earth Science Engineering, P.C.
P.O. Box 226
Villsboro, New York 12996
Tel. (518) 963-8133
Fax (518) 963-7490

SITE LOCATION PLAN / MAP KEY

FOOTING
FOUNDATION
FLOORING

SHEET 3

SHEET 4

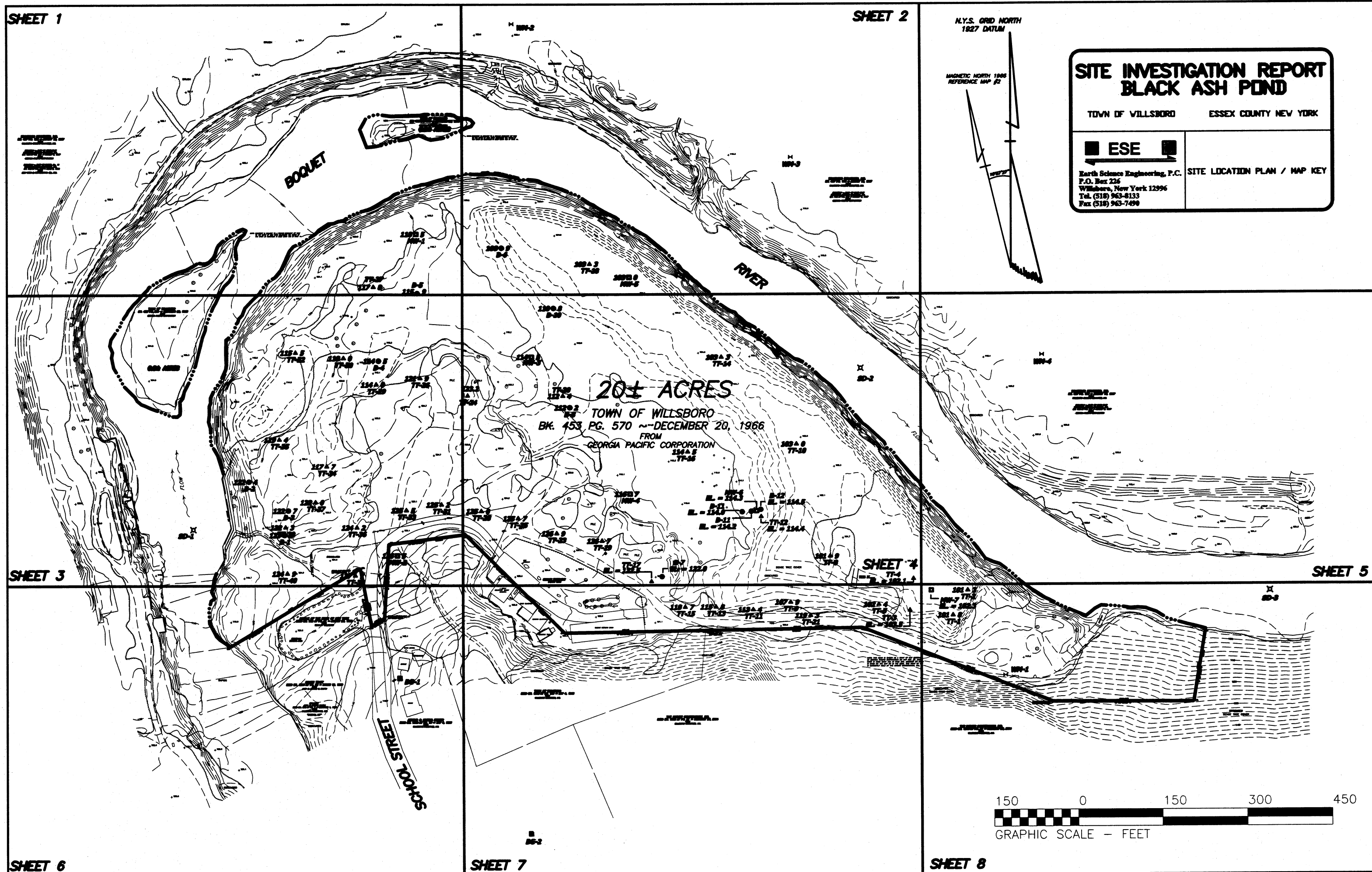
SHEET 5

SHEET 6

SHEET 7

SHEET 8

page 1



~ ELEVATION DATA ~

BORING No.	ELEVATION	TRENCH No.	ELEVATION	TRENCH No.	ELEVATION	MONITORING WELL No.	ELEVATION
B-1	123.1	TT-1	101.8	TT-21	119.3	MW-1	118.5
B-2	122.4	TT-2	101.3	TT-22	104.8	MW-2	126.5
B-3	122.7	TT-3	103.5	TT-23	126.9	MW-3	114.5
B-4	114.5	TT-4	102.1	TT-24	123.2	MW-4	116.7
B-5	115.9	TT-5	102.4	TT-25	125.7	MW-5	103.0
B-6	108.9	TT-6	102.7	TT-26	121.9	MW-6	114.3
B-7	122.0	TT-7	107.6	TT-27	117.8	MW-7	102.3
B-8	112.2	TT-8	101.9	TT-28	125.0		
B-9	114.2	TT-9	107.9	TT-29	114.0		
B-10	110.8	TT-10	103.0	TT-30	118.0		
B-11	114.0	TT-11	113.4	TT-31	125.2		
B-12	114.5	TT-12	114.4	TT-32	115.5		
		TT-13	115.8	TT-33	125.5		
		TT-14	103.3	TT-34	117.7		
		TT-15	118.7	TT-35	119.4		
		TT-16	114.5	TT-36	124.2		
		TT-17	122.5	TT-37	122.0		
		TT-18	103.3	TT-38	127.7		
		TT-19	126.7	TT-39	122.3		
		TT-20	112.4	TT-40	124.9		

~ SAMPLING LEGEND ~

- 103 3
TT-18
TEST TRENCH AND ELEVATION
- 103 0
MW-5
MONITORING WELL AND ELEVATION
- 110 8
B-10
BORING AND ELEVATION
- SD-1
RIVER SEDIMENT SAMPLE
- BG-1
BACKGROUND SAMPLE
- WM-1
WASTE MEDIA SAMPLE

~ MAP REFERENCES ~

- #1. MAP OF SURVEY SHOWING PREMISES CONVEYED BY THE NEW YORK & PENNSYLVANIA CO., INC. TO CHAMPLAIN MILLS PROPERTIES, INC. BY BY SPENCER J. JOHNSTON, L.S., AND FREDERICK W. VOLKMAN, L.S., SHEET No. 2 OF 3, 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 WILLSBORO 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.
- #4. 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.
- #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 WILLSBORO AND EARTH SCIENCE ENGINEERING, P.C. BY KEVIN A. HALL, L.S., DATED AUGUST 29, 2003.

~ LEGEND ~

- C.P.
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
- SPOT ELEVATION
- CHAINLINK FENCELINE
- PAVED DRIVE OR ROAD
- UNPAVED DRIVE OR ROAD
- TRAIL OR PATH
- UTILITY POLE AND OVERHEAD WIRES
- TREELINE
- LARGE BOULDERS

~ SAMPLING NOTES ~

- #1 MONITORING WELL ELEVATIONS TAKEN ON CONCRETE BELOW LOCK PORTION OF CAP.
- #2 BORING AND TEST TRENCH ELEVATIONS TAKEN AT STAKE.
- #3 RIVER SEDIMENT SAMPLING LOCATIONS APPROXIMATED

~ 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.
- #2 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.
- #3 "ASSUMED ROAD BOUNDS" INDICATES THAT LIMITED WORK HAS BEEN DONE TO ATTEMPT TO DETERMINE THE TRUE LEGAL BOUNDS OF THE ROAD SHOWN HEREON.
- #4 WETLANDS, IF ANY, NOT SHOWN HEREON.
- #5 UNDERGROUND UTILITIES NOT SHOWN HEREON.
- #6 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.
- #7 MAPPING COMPILED BY TVGA CONSULTANTS(TVGA) USING PHOTOGRAMMETRIC METHODS. AERIAL 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.
- #8 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.
- #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.	CONTENTS
1	SITE LOCATION PLAN AND MAP KEY ~ 1" = 150'
2	ELEVATION DATA, LEGENDS, NOTES AND MAP REFERENCES
3	SHEET 1 ~ 1" = 50'
4	SHEET 2 ~ 1" = 50'
5	SHEET 3 ~ 1" = 50'
6	SHEET 4 ~ 1" = 50'
7	SHEET 5 ~ 1" = 50'
8	SHEET 6 ~ 1" = 50'
9	SHEET 7 ~ 1" = 50'
10	SHEET 8 ~ 1" = 50'
11	GROUNDWATER CONTOURS / FLOW DIRECTIONS ~ 1" = 150'

Figure –2
Environmental Sampling Location Plan

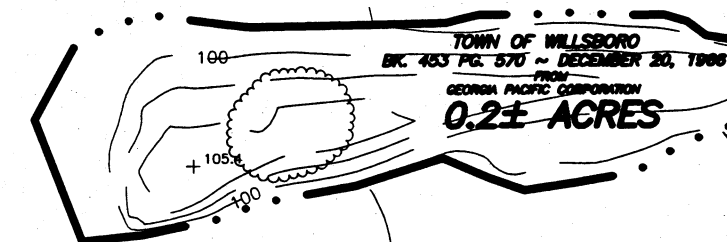
SHEET 1

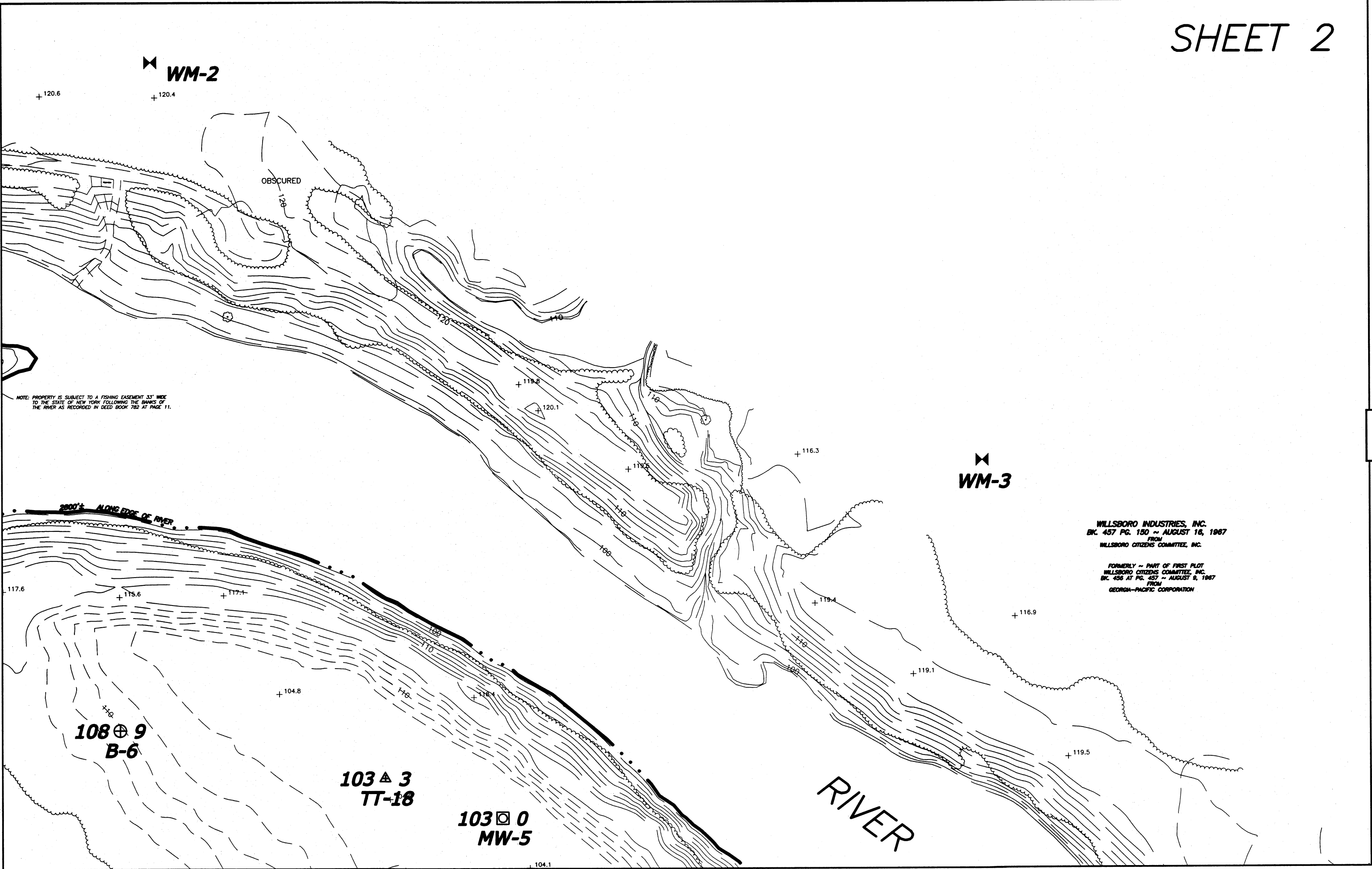
WILLSBORO INDUSTRIES, INC.
BK. 457 PG. 150 ~ AUGUST 16, 1967
FROM
WILLSBORO CITIZENS COMMITTEE, INC.

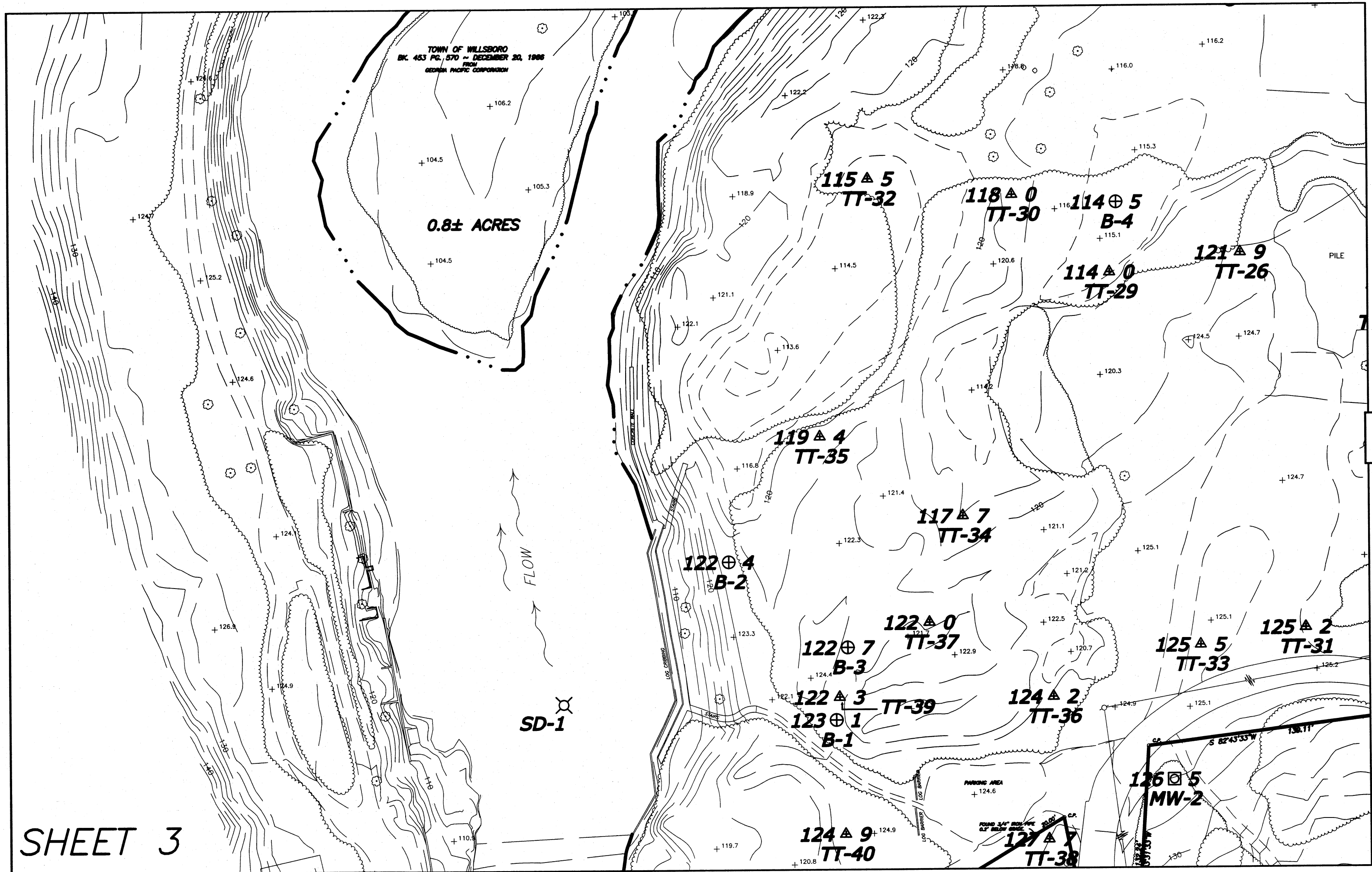
FORMERLY ~ PART OF FIRST PLOT
WILLSBORO CITIZENS COMMITTEE, INC.
BK. 456 AT PG. 457 ~ AUGUST 8, 1967
FROM
GEORGIA-PACIFIC CORPORATION

FORMERLY ~ PART OF PARCEL No. 11
CHAMPLAIN MILLS PROPERTIES, INC.
BK. 460 AT PG. 240 ~ JUNE 6, 1962
FROM
NEW YORK & PENNSYLVANIA CO., INC.

NOTE: PROPERTY IS SUBJECT TO A FISHING EASEMENT 33' WIDE
TO THE STATE OF NEW YORK FOLLOWING THE BANKS OF
THE RIVER AS RECORDED IN DEED BOOK 782 AT PAGE 11.







TOWN OF WILLSBORO
BK. 453 PG. 570 ~ DECEMBER 20, 1986
FROM
GEORGIA PACIFIC CORPORATION

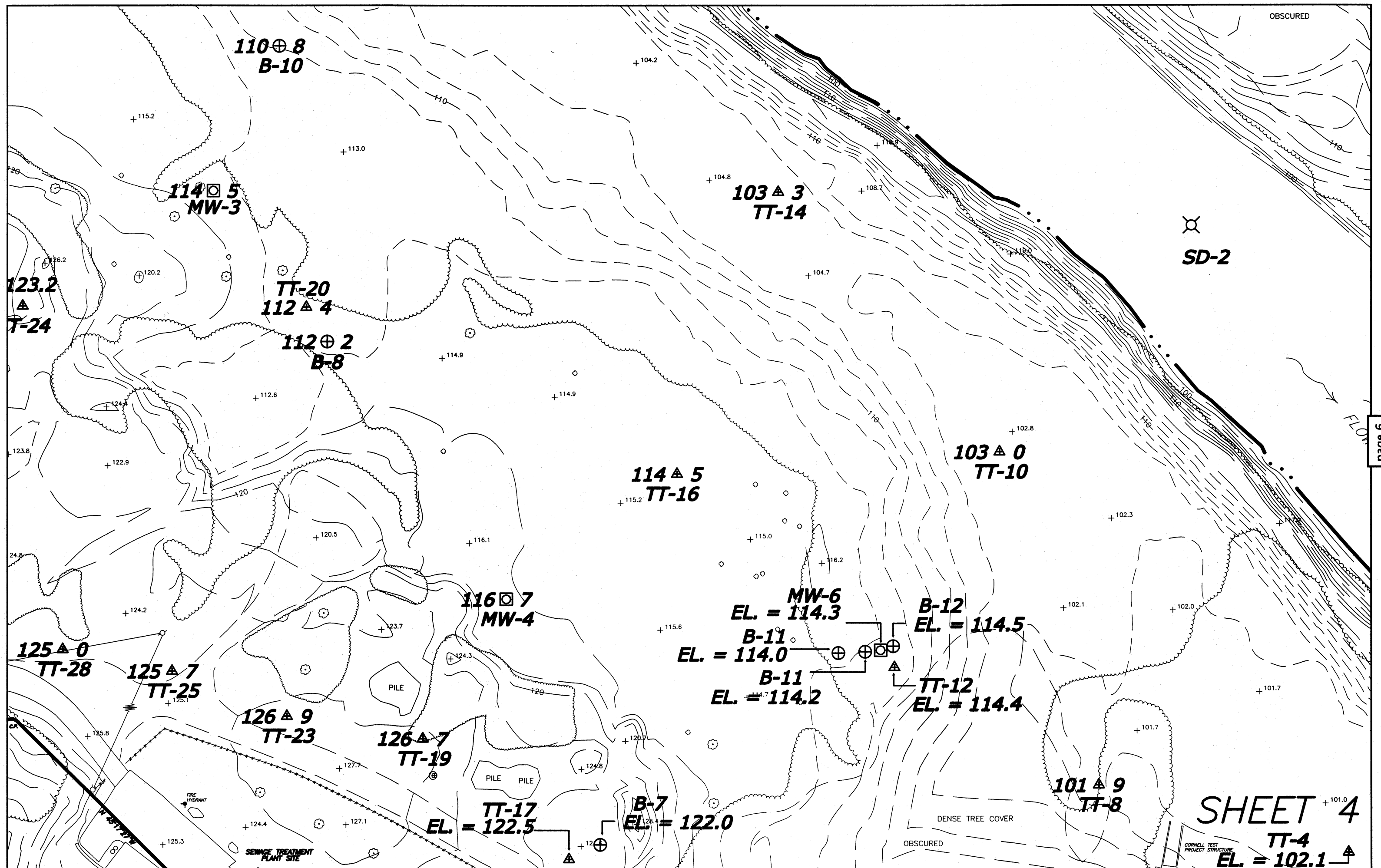
0.8± ACRES

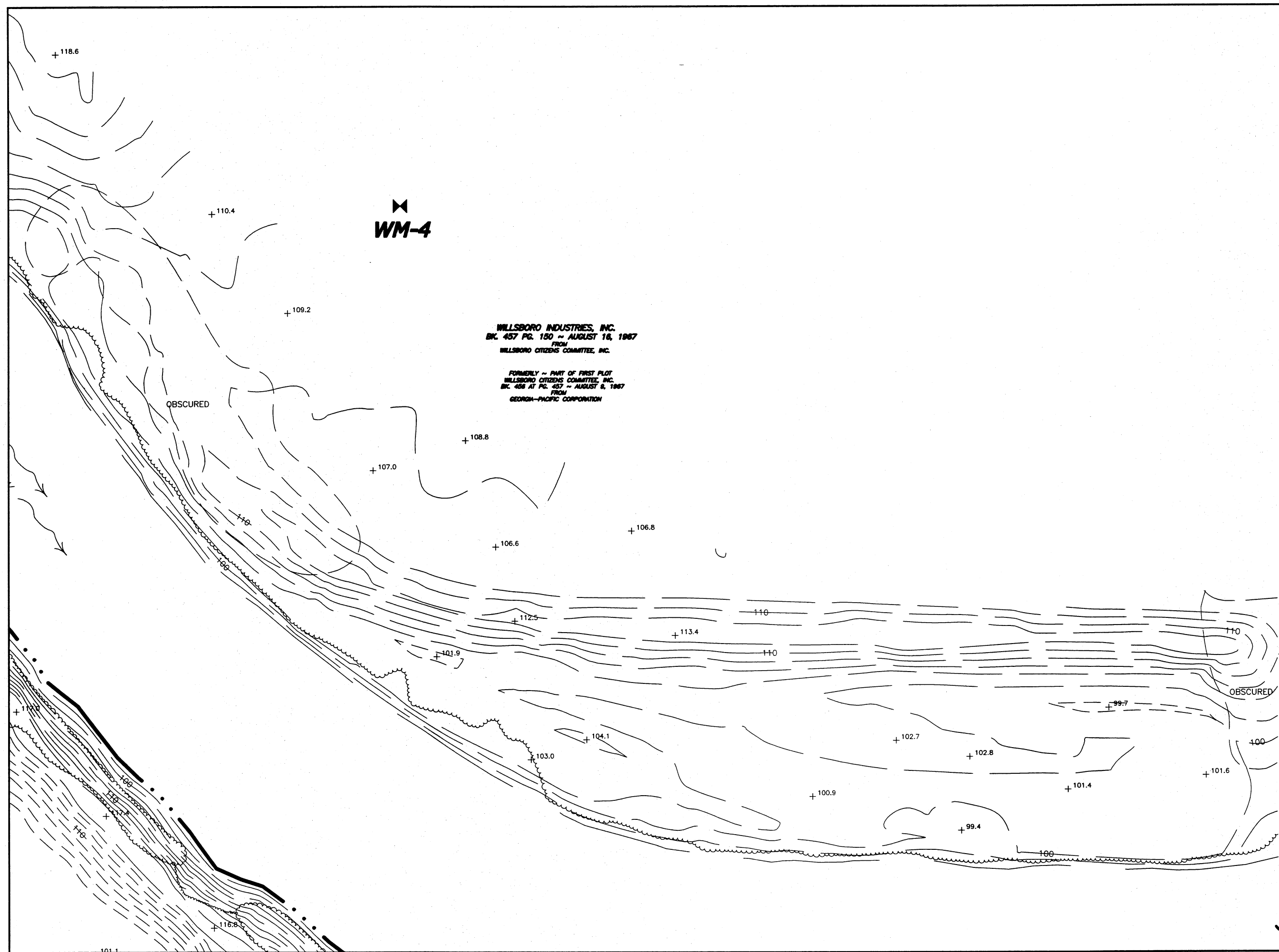
SD-1

FLOW

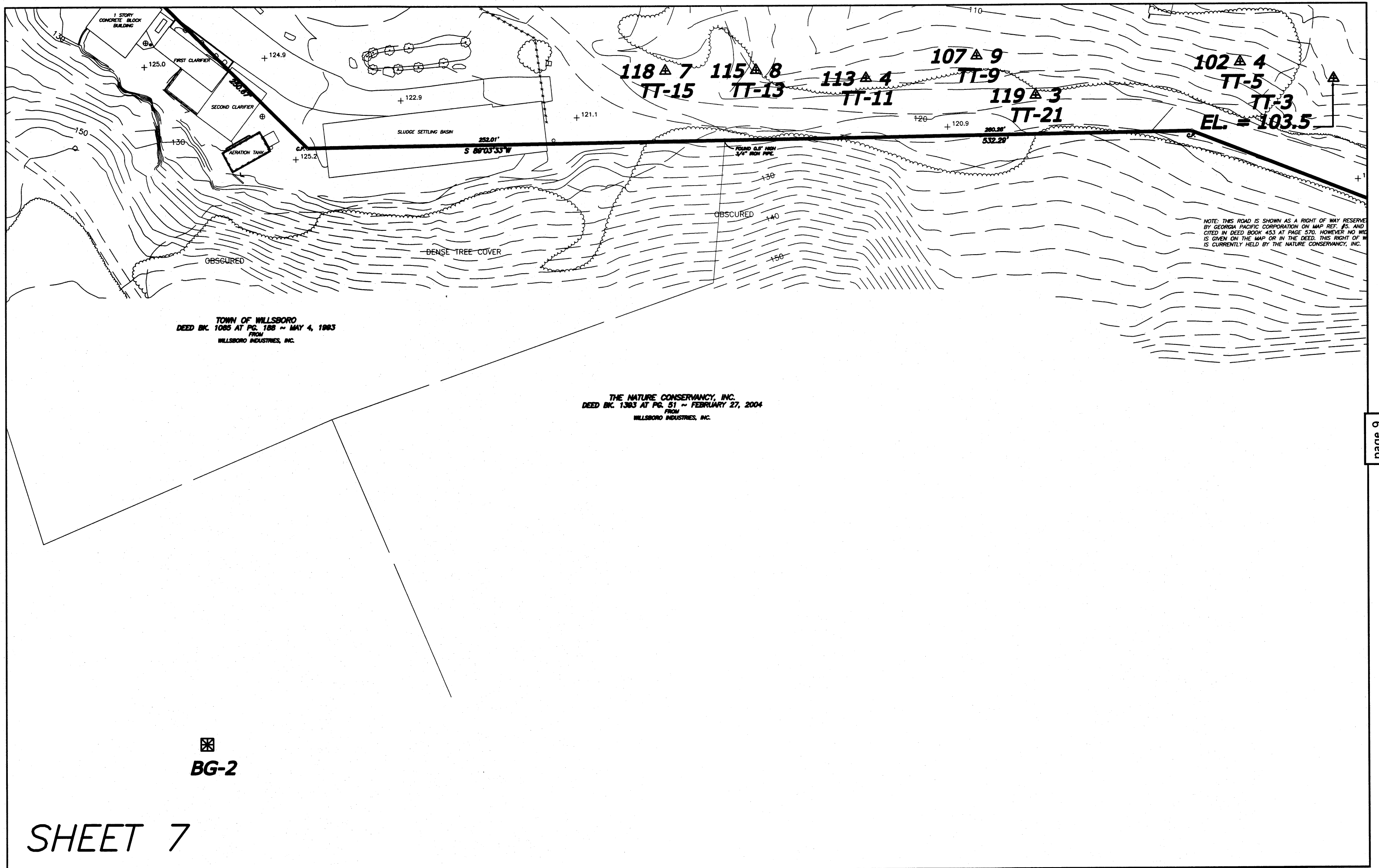
SHEET 3

page 5









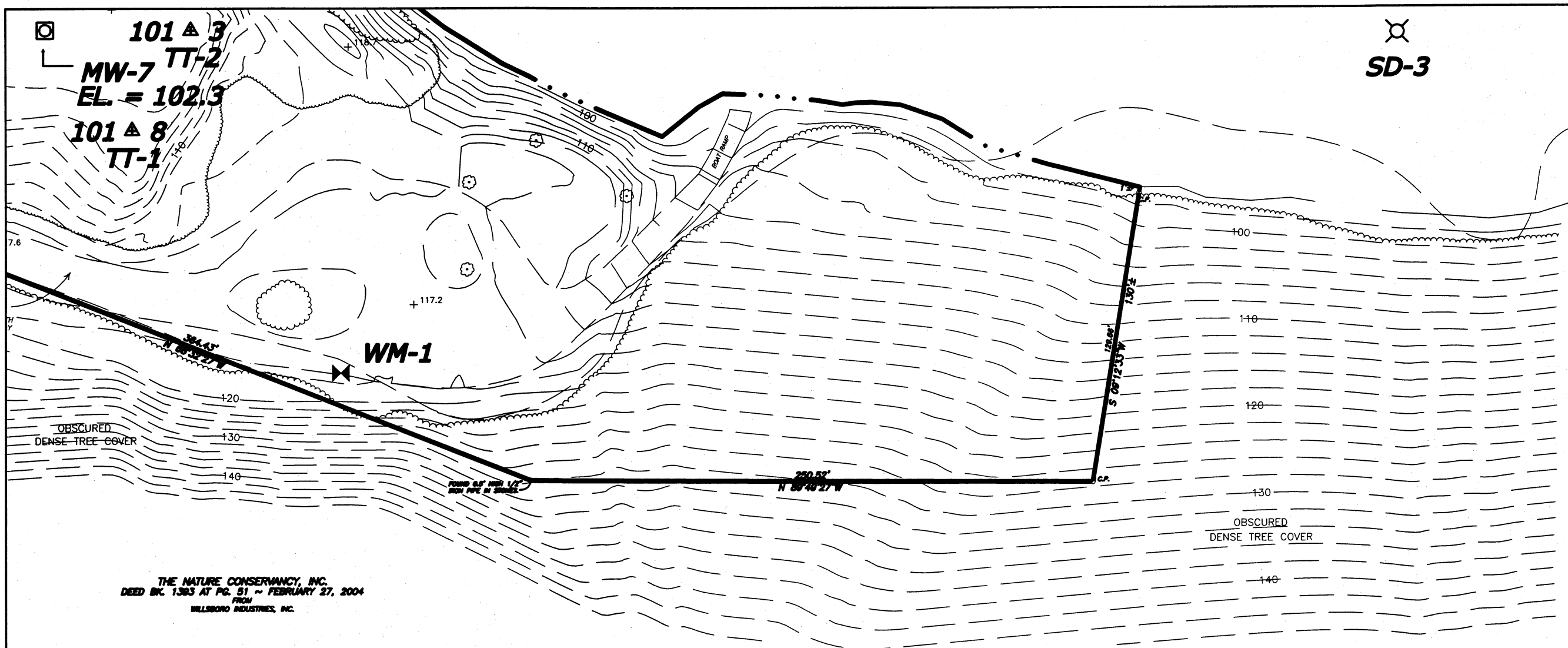


Figure –3
Groundwater Contours and Flow Directions



~ LEGEND ~

-  No. 4
106.08
MONITORING WELL AND
GROUNDWATER ELEVATION
-  GROUNDWATER FLOW DIRECTION
-  119
GROUNDWATER ELEVATION CONTOUR

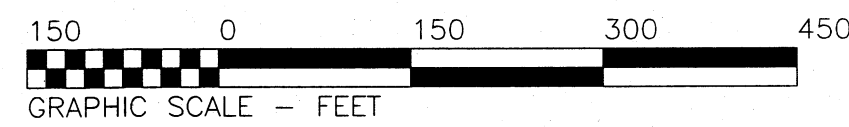
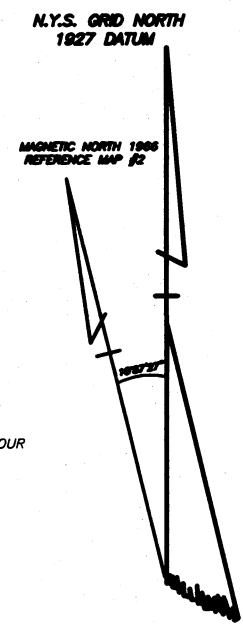


Figure —4
Extent of Contamination

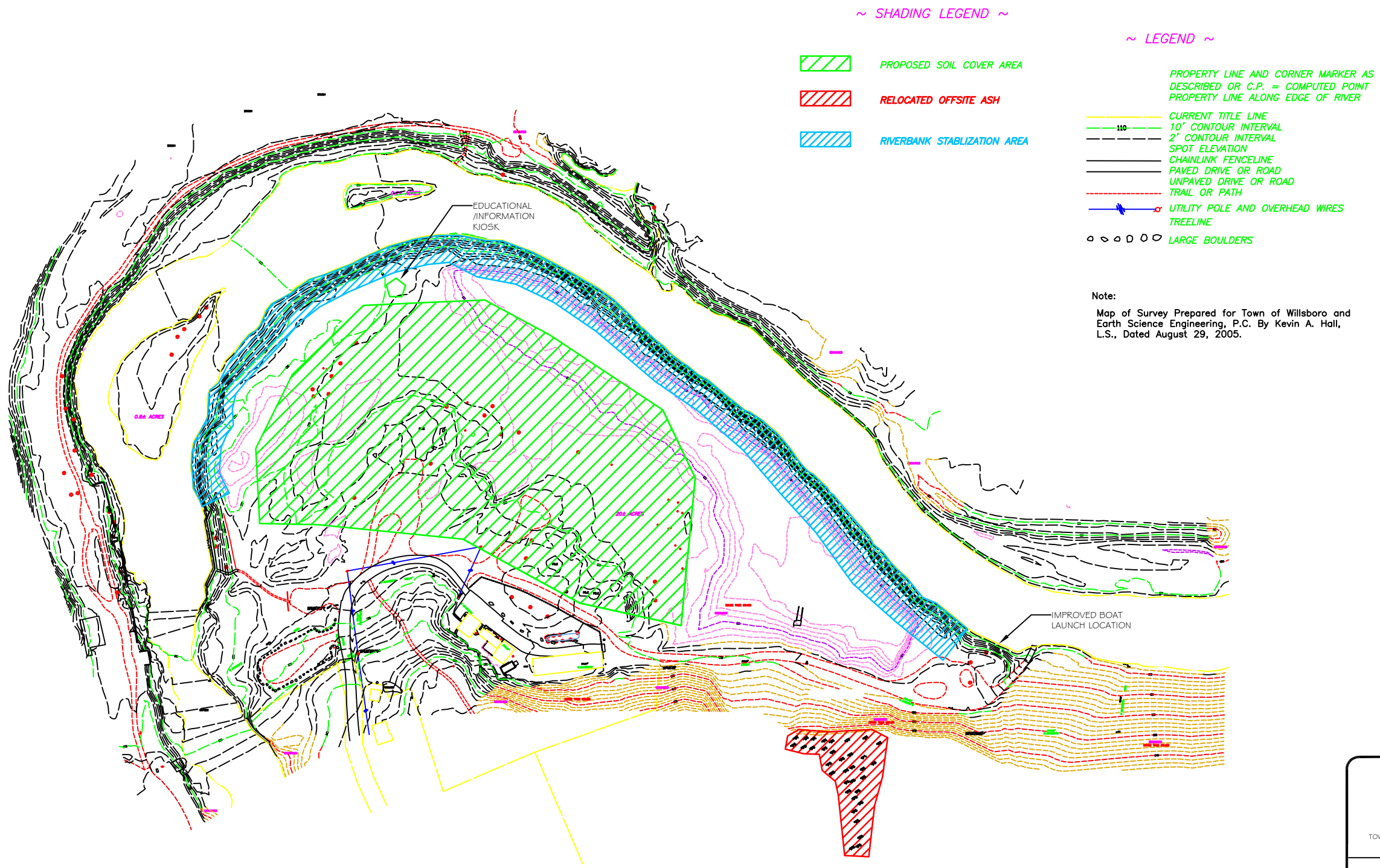


FIGURE 4
EXTENT OF
CONTAMINATION

TOWN OF WILLSBORO ESSEX COUNTY NEW YORK

ESE
Earth Science Engineering, P.C.
P.O. Box 226
Willsboro, New York 12996
Tel: (518) 963-8133
Fax: (518) 963-7490

PLAN
DATE: March 2008
Scale: 1" = 100'

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	

TP-05

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

TP-06

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	

TP-11

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	

TP-13

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 than at TP-14
7-	Soil	

TP-16

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

TP-17

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

TP-18

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

TP-19

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	

TP-23

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

TP-24

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

TP-25

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	

TP-29

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

TP-30

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

TP-31

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 Soil	2-4" Deep, Inconsistent
6-	Soil	

TP-34

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

Hill Bottom Samples:

TP-35

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

TP-36

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	

TP-40

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

Appendix –B
Supplemental SI Analytical Data



Experience is the solution

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

Received

ESE, P.C.

Date 9/6/07

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 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.

A handwritten signature in blue ink, appearing to be "V. J. O.", is written over a horizontal line.

Laboratory Manager

Date: _____

9/4/07



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SAMPLE DATA

SUMMARY PACKAGE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	*VOA GC/MS Method	*BNA GC/MS Method	*PCB GC Method	*Pest GC Method	*Metals	*Other CN
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					X	
SD-9-SU-07-6	070622060-005					X	
SD-9-SU-07-18	070622060-006					X	
SD-10-SU-07-6	070622060-007					X	
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	



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Case Narrative

Client: Earth Science Engineering - Black Ash Pond / Willsboro

Case: ESE 0702

SDG: SD-7-SU-07-6

<u>Sample ID</u>	<u>Laboratory Sample ID</u>	<u>Date Received</u>	<u>VTSR</u>	<u>Matrix</u>
SD-7-SU-07-6	070622060-001	06/22/07	13:00	Soil
SD-7-SU-07-18	070622060-002	06/22/07	13:00	Soil
SD-8-SU-07-6	070622060-003	06/22/07	13:00	Soil
SD-8-SU-07-18	070622060-004	06/22/07	13:00	Soil
SD-9-SU-07-6	070622060-005	06/22/07	13:00	Soil
SD-9-SU-07-18	070622060-006	06/22/07	13:00	Soil
SD-10-SU-07-6	070622060-007	06/22/07	13:00	Soil
SD-10-SU-07-18	070622060-008	06/22/07	13:00	Soil
SD-11-SU-07-6	070622060-009	06/22/07	13:00	Soil
SD-11-SU-07-18	070622060-010	06/22/07	13:00	Soil
WM-1-SU-07-10	070622060-011	06/22/07	13:00	Soil
WM-2-SU-07-6	070622060-012	06/22/07	13:00	Soil
WM-3-SU-07-9	070622060-013	06/22/07	13:00	Soil
WM-4-SU-07-8	070622060-014	06/22/07	13:00	Soil

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."

A handwritten signature in blue ink, appearing to read "Paul D.", is written over a horizontal line.

Laboratory Manager

Date: 9/4/07



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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."

A handwritten signature in black ink, appearing to read "V. A. R.", is written over a horizontal line.

Laboratory Manager

Date: 9/4/07

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Metals Requested	Date Rec'd at Lab	Date Prepared	Date Analyzed
070622060-001	WATER	ICP	6/22/07	6/29/07	7/18/07
		Mercury		6/29/07	6/30/07
070622060-002	WATER	ICP	6/22/07	6/29/07	7/18/07
		Mercury		6/29/07	6/30/07
070622060-003	WATER	ICP	6/22/07	6/29/07	7/18/07
		Mercury		6/29/07	6/30/07
070622060-004	WATER	ICP	6/22/07	6/29/07	7/18/07
		Mercury		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
070622060-006	WATER	ICP	6/22/07	6/29/07	7/18/07
		Mercury		6/29/07	6/30/07
070622060-007	WATER	ICP	6/22/07	6/29/07	7/18/07
		Mercury		6/29/07	6/30/07
070622060-008	WATER	ICP	6/22/07	6/29/07	7/18/07
		Mercury		6/29/07	6/30/07
070622060-009	WATER	ICP	6/22/07	6/29/07	7/18/07
		Mercury		6/29/07	6/30/07
070622060-010	WATER	ICP	6/22/07	6/29/07	7/18/07
		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

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SD-7-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: 070622060-001A

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	M
7429-90-5	Aluminum	2230		E	P
7440-36-0	Antimony	4.2	U		P
7440-38-2	Arsenic	0.62	U	N	P
7440-39-3	Barium	8.5	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
7440-70-2	Calcium	1470		E	P
7440-47-3	Chromium	0.70	U		P
7440-48-4	Cobalt	1.9	B		P
7440-50-8	Copper	0.64	B		P
7439-89-6	Iron	4520		E	P
7439-97-6	Mercury	0.04	U		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	B		P
7440-09-7	Potassium	86.2	B		P
7782-49-2	Selenium	0.62	U		P
7440-22-4	Silver	0.46	U		P
7440-23-5	Sodium	133	B		P
7440-28-0	Thallium	0.45	B	N	P
7440-62-2	Vanadium	5.7	B		P
7440-66-6	Zinc	13.1		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SD-7-SU-07-18

Lab Name: Adirondack EnvironmentalContract: Black Ash PondLab Code: AESCase No.: ESE 0702

SAS No.: _____

SDG No.: SD-7-SU-07-6Matrix (soil/water): SOILLab Sample ID: 070622060-002ALevel (low/med): LOWDate Received: 6/22/2007% Solids: 78Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3380		E	P
7440-36-0	Antimony	4.1	U		P
7440-38-2	Arsenic	0.61	U	N	P
7440-39-3	Barium	12.4	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
7440-70-2	Calcium	2260		E	P
7440-47-3	Chromium	2.5	B		P
7440-48-4	Cobalt	2.6	B		P
7440-50-8	Copper	1.3	B		P
7439-89-6	Iron	6600		E	P
7439-97-6	Mercury	0.04	U		CV
7439-92-1	Lead	2.3			P
7439-95-4	Magnesium	1720		E	P
7439-96-5	Manganese	78.0		E	P
7440-02-0	Nickel	3.6	B		P
7440-09-7	Potassium	140	B		P
7782-49-2	Selenium	0.61	U		P
7440-22-4	Silver	0.46	U		P
7440-23-5	Sodium	188	B		P
7440-28-0	Thallium	0.41	U	N	P
7440-62-2	Vanadium	3.2	B		P
7440-66-6	Zinc	18.6		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

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.: SD-7-SU-07-6

Matrix (soil/water): SOIL Lab Sample ID: 070622060-003A

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	M
7429-90-5	Aluminum	2130		E	P
7440-36-0	Antimony	4.1	U		P
7440-38-2	Arsenic	0.61	U	N	P
7440-39-3	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
7440-70-2	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	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	U		P
7440-22-4	Silver	0.46	U		P
7440-23-5	Sodium	129	B		P
7440-28-0	Thallium	0.41	U	N	P
7440-62-2	Vanadium	5.1	B		P
7440-66-6	Zinc	12.9		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SD-8-SU-07-18

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: 070622060-004A

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

% Solids: 77

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3920		E	P
7440-36-0	Antimony	4.2	U		P
7440-38-2	Arsenic	0.63	U	N	P
7440-39-3	Barium	22.0	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
7440-70-2	Calcium	2100		E	P
7440-47-3	Chromium	1.0	B		P
7440-48-4	Cobalt	3.3	B		P
7440-50-8	Copper	0.82	B		P
7439-89-6	Iron	8990		E	P
7439-97-6	Mercury	0.04	U		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		P
7440-09-7	Potassium	143	B		P
7782-49-2	Selenium	0.63	U		P
7440-22-4	Silver	0.47	U		P
7440-23-5	Sodium	172	B		P
7440-28-0	Thallium	0.42	U	N	P
7440-62-2	Vanadium	5.7	B		P
7440-66-6	Zinc	20.6		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SD-9-SU-07-6

Lab Name: Adirondack EnvironmentalContract: Black Ash PondLab Code: AESCase No.: ESE 0702

SAS No.: _____

SDG No.: SD-7-SU-07-6Matrix (soil/water): SOILLab Sample ID: 070622060-005ALevel (low/med): LOWDate Received: 6/22/2007% Solids: 97Concentration Units (ug/L or mg/kg dry weight): MG/KG

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

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SD-9-SU-07-18

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: 070622060-006A

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

% Solids: 77

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3900		E	P
7440-36-0	Antimony	4.2	U		P
7440-38-2	Arsenic	0.63	U	N	P
7440-39-3	Barium	13.1	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
7440-70-2	Calcium	2130		E	P
7440-47-3	Chromium	1.0	B		P
7440-48-4	Cobalt	2.6	B		P
7440-50-8	Copper	0.52	B		P
7439-89-6	Iron	7950		E	P
7439-97-6	Mercury	0.04	U		CV
7439-92-1	Lead	0.42	U		P
7439-95-4	Magnesium	983	B	E	P
7439-96-5	Manganese	90.8		E	P
7440-02-0	Nickel	2.2	B		P
7440-09-7	Potassium	131	B		P
7782-49-2	Selenium	0.63	U		P
7440-22-4	Silver	0.47	U		P
7440-23-5	Sodium	400	B		P
7440-28-0	Thallium	0.42	U	N	P
7440-62-2	Vanadium	4.3	B		P
7440-66-6	Zinc	14.6		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SD-10-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: 070622060-007A

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

% Solids: 77

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4950		E	P
7440-36-0	Antimony	4.2	U		P
7440-38-2	Arsenic	0.63	U	N	P
7440-39-3	Barium	8.5	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
7440-70-2	Calcium	3390		E	P
7440-47-3	Chromium	1.8	B		P
7440-48-4	Cobalt	2.2	B		P
7440-50-8	Copper	1.0	B		P
7439-89-6	Iron	5050		E	P
7439-97-6	Mercury	0.04	U		CV
7439-92-1	Lead	0.42	U		P
7439-95-4	Magnesium	1030	B	E	P
7439-96-5	Manganese	36.6		E	P
7440-02-0	Nickel	3.1	B		P
7440-09-7	Potassium	136	B		P
7782-49-2	Selenium	0.63	U		P
7440-22-4	Silver	0.47	U		P
7440-23-5	Sodium	526	B		P
7440-28-0	Thallium	0.42	U	N	P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	11.0		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SD-10-SU-07-18

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0702 SAS No.: _____ SDG No.: SD-7-SU-07-6Matrix (soil/water): SOIL Lab Sample ID: 070622060-008ALevel (low/med): LOW Date Received: 6/22/2007% Solids: 77Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3620		E	P
7440-36-0	Antimony	4.2	U		P
7440-38-2	Arsenic	0.62	U	N	P
7440-39-3	Barium	10.1	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
7440-70-2	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		P
7439-89-6	Iron	5580		E	P
7439-97-6	Mercury	0.04	U		CV
7439-92-1	Lead	0.66	B		P
7439-95-4	Magnesium	1350		E	P
7439-96-5	Manganese	45.7		E	P
7440-02-0	Nickel	2.9	B		P
7440-09-7	Potassium	171	B		P
7782-49-2	Selenium	0.62	U		P
7440-22-4	Silver	0.47	U		P
7440-23-5	Sodium	314	B		P
7440-28-0	Thallium	0.41	U	N	P
7440-62-2	Vanadium	2.7	B		P
7440-66-6	Zinc	14.9		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

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): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3890		E	P
7440-36-0	Antimony	4.9	B		P
7440-38-2	Arsenic	0.68	B	N	P
7440-39-3	Barium	9.9	B		P
7440-41-7	Beryllium	0.08	U		P
7440-42-8	Boron	2.0	U		P
7440-43-9	Cadmium	0.13	U		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	U		P
7439-89-6	Iron	7090		E	P
7439-97-6	Mercury	0.04	U		CV
7439-92-1	Lead	0.79	B		P
7439-95-4	Magnesium	1480		E	P
7439-96-5	Manganese	59.6		E	P
7440-02-0	Nickel	3.1	B		P
7440-09-7	Potassium	161	B		P
7782-49-2	Selenium	0.64	U		P
7440-22-4	Silver	0.48	U		P
7440-23-5	Sodium	311	B		P
7440-28-0	Thallium	0.43	U	N	P
7440-62-2	Vanadium	3.1	B		P
7440-66-6	Zinc	17.3		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SD-11-SU-07-18

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0702 SAS No.: _____ SDG No.: SD-7-SU-07-6Matrix (soil/water): SOIL Lab Sample ID: 070622060-010ALevel (low/med): LOW Date Received: 6/22/2007% Solids: 77Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4480		E	P
7440-36-0	Antimony	4.2	U		P
7440-38-2	Arsenic	0.63	U	N	P
7440-39-3	Barium	21.3	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
7440-70-2	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		P
7439-89-6	Iron	5230		E	P
7439-97-6	Mercury	0.04	U		CV
7439-92-1	Lead	0.44	B		P
7439-95-4	Magnesium	1190	B	E	P
7439-96-5	Manganese	37.3		E	P
7440-02-0	Nickel	2.7	B		P
7440-09-7	Potassium	181	B		P
7782-49-2	Selenium	0.63	U		P
7440-22-4	Silver	0.47	U		P
7440-23-5	Sodium	483	B		P
7440-28-0	Thallium	0.42	U	N	P
7440-62-2	Vanadium	1.1	B		P
7440-66-6	Zinc	17.6		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

 Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

WM-1-SU-07-10

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0702 SAS No.: _____ SDG No.: SD-7-SU-07-6Matrix (soil/water): SOIL Lab Sample ID: 070622060-011ALevel (low/med): LOW Date Received: 6/22/2007% Solids: 77Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	2950		E	P
7440-36-0	Antimony	4.2	U		P
7440-38-2	Arsenic	15.0		N	P
7440-39-3	Barium	76.1			P
7440-41-7	Beryllium	0.67	B		P
7440-42-8	Boron	1.9	U		P
7440-43-9	Cadmium	0.18	B		P
7440-70-2	Calcium	1590		E	P
7440-47-3	Chromium	7.8			P
7440-48-4	Cobalt	4.0	B		P
7440-50-8	Copper	21.5			P
7439-89-6	Iron	4870		E	P
7439-97-6	Mercury	0.33			CV
7439-92-1	Lead	12.1			P
7439-95-4	Magnesium	188	B	E	P
7439-96-5	Manganese	37.6		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	U		P
7440-23-5	Sodium	50.3	B		P
7440-28-0	Thallium	0.42	U	N	P
7440-62-2	Vanadium	22.1			P
7440-66-6	Zinc	12.9		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

 Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

WM-2-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: 070622060-012A

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

% Solids: 80

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1890		E	P
7440-36-0	Antimony	4.1	U		P
7440-38-2	Arsenic	8.1		N	P
7440-39-3	Barium	40.3	B		P
7440-41-7	Beryllium	0.30	B		P
7440-42-8	Boron	1.9	U		P
7440-43-9	Cadmium	0.15	B		P
7440-70-2	Calcium	1090	B	E	P
7440-47-3	Chromium	6.2			P
7440-48-4	Cobalt	4.8	B		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	B	E	P
7439-96-5	Manganese	39.3		E	P
7440-02-0	Nickel	12.9			P
7440-09-7	Potassium	148	B		P
7782-49-2	Selenium	1.6			P
7440-22-4	Silver	0.45	U		P
7440-23-5	Sodium	42.7	B		P
7440-28-0	Thallium	0.40	U	N	P
7440-62-2	Vanadium	18.2			P
7440-66-6	Zinc	13.1		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

WM-3-SU-07-9

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: 070622060-013A

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

% Solids: 71

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	20200		E	P
7440-36-0	Antimony	4.6	U		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	U		P
7440-43-9	Cadmium	0.29	B		P
7440-70-2	Calcium	10400		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	P
7439-97-6	Mercury	0.99			CV
7439-92-1	Lead	13.8			P
7439-95-4	Magnesium	1480		E	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	U		P
7440-22-4	Silver	0.51	U		P
7440-23-5	Sodium	236	B		P
7440-28-0	Thallium	0.45	U	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: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

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): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
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
7440-70-2	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
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

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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DUPLICATES

SAMPLE NO.

WM-4-SU-07-8DP

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0702 SAS No.: _____ SDG No.: SD-7-SU-07-6Matrix (soil/water): SOIL Level (low/med): LOW% Solids for Sample: 79.9 % Solids for Duplicate: 79.9Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		3501.9880		3564.0130		1.8		P
Antimony		4.0551	U	4.0551	U			P
Arsenic	2.5	8.3660		7.7199		8.0		P
Barium	50.1	50.6962		51.2038		1.0		P
Beryllium		0.5753	B	0.5724	B	0.5		P
Cadmium		0.1841	B	0.2055	B	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	B	3.1865	B	5.5		P
Copper	6.3	16.8132		17.1397		1.9		P
Iron		4364.2840		4282.2760		1.9		P
Mercury	0.1	0.3066		0.4130		29.6		CV
Lead		18.2054		17.2588		5.3		P
Magnesium		395.4205	B	397.7073	B	0.6		P
Manganese		87.8974		83.1527		5.5		P
Nickel		8.3549	B	7.9350	B	5.2		P
Potassium		222.1849	B	224.7243	B	1.1		P
Selenium	1.3	2.0348		1.5317		28.2		P
Silver		0.4506	U	0.4506	U			P
Sodium		87.5442	B	87.6892	B	0.2		P
Thallium		0.4005	U	0.6755	B	200.0		P
Vanadium		11.7733	B	11.7738	B	0.0		P
Zinc	5.0	15.9789		15.1019		5.6		P

USEPA - CLP

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DUPLICATES

SAMPLE NO.

SD-11-SU-07-18DP

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
% Solids for Sample: 76.6 % Solids for Duplicate: 76.6

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Mercury		0.0392	U	0.0392	U			CV

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

WM-4-SU-07-8MS

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0702 SAS No.: _____ SDG No.: SD-7-SU-07-6Matrix (soil/water): SOIL Level (low/med): LOW% Solids for Sample: 79.9Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		5233.2090		3501.9880		500.63	345.8		P
Antimony	75 - 125	95.2709		4.0551	U	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	B	12.52	106.3		P
Cadmium	75 - 125	12.4917		0.1841	B	12.52	98.3		P
Calcium		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	B	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		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	B	395.4205	B	0.00	0.0		P
Manganese	75 - 125	206.0908		87.8974		125.16	94.4		P
Nickel	75 - 125	139.1987		8.3549	B	125.16	104.5		P
Potassium		285.7538	B	222.1849	B	0.00	0.0		P
Selenium	75 - 125	5.1258		2.0348		2.50	123.6		P
Silver	75 - 125	10.1764		0.4506	U	12.52	81.3		P
Sodium		110.6404	B	87.5442	B	0.00	0.0		P
Thallium	75 - 125	9.1551		0.4005	U	12.52	73.1	N	P
Vanadium	75 - 125	145.9158		11.7733	B	125.16	107.2		P
Zinc	75 - 125	144.8144		15.9789		125.16	102.9		P

Comments:

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

SD-11-SU-07-18MS

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0702 SAS No.: _____ SDG No.: SD-7-SU-07-6Matrix (soil/water): SOIL Level (low/med): LOW% Solids for Sample: 76.6Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Mercury	75 - 125	1.3185		0.0392	U	1.31	100.6		CV

Comments:

USEPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

WM-4-SU-07-8A

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0702 SAS No.: _____ SDG No.: SD-7-SU-07-6Matrix (soil/water): SOIL Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		4469.34		3501.99		1001.3	96.6		P
Antimony		250.17		4.06	U	250.3	99.9		P
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	B	25.0	105.2		P
Cadmium		25.94		0.18	B	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	B	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	B	395.42	B	0.0	0.0		P
Manganese		344.44		87.90		250.3	102.5		P
Nickel		281.57		8.35	B	250.3	109.2		P
Potassium		223.94	B	222.18	B	0.0	0.0		P
Selenium		7.47		2.03		5.0	108.8		P
Silver		22.64		0.45	U	25.0	90.6		P
Sodium		87.97	B	87.54	B	0.0	0.0		P
Thallium		22.52		0.40	U	25.0	90.1		P
Vanadium		271.39		11.77	B	250.3	103.7		P
Zinc		280.56		15.98		250.3	105.7		P

Comments: _____

USEPA - CLP

3

BLANKS

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

Analyte	Initial Calib. Blank (ug/L)	Continuing Calibration Blank (ug/L)						Preparation Blank	C	M
		1	C	2	C	3	C			
Aluminum	15.1 B	17.9 B		9.2 B		8.3 B		4.670 B		P
Antimony	16.2 U	16.2 U		16.2 U		16.2 U		3.240 U		P
Arsenic	2.4 U	2.4 U		2.4 U		2.4 U		0.480 U		P
Barium	3.4 U	3.4 U		3.4 U		3.4 U		0.680 U		P
Beryllium	0.3 U	0.3 U		0.3 U		0.3 U		0.060 U		P
Cadmium	0.5 U	0.5 U		0.5 U		0.5 U		0.100 U		P
Calcium	6.9 U	6.9 U		6.9 U		6.9 U		1.380 U		P
Chromium	2.7 U	2.7 U		2.7 U		2.7 U		0.540 U		P
Cobalt	0.9 U	0.9 U		0.9 U		0.9 U		0.180 U		P
Copper	2.0 U	2.0 U		2.0 U		2.0 U		0.400 U		P
Iron	7.3 U	12.5 B		7.3 U		7.3 U		1.460 U		P
Mercury	0.06 U	0.06 U		0.06 U		0.06 U		0.030 U		CV
Lead	1.6 U	1.6 U		1.6 U		1.6 U		0.320 U		P
Magnesium	9.2 U	9.2 U		9.2 U		9.2 U		1.840 U		P
Manganese	0.3 U	0.3 U		0.3 U		0.3 U		0.060 U		P
Nickel	0.9 U	0.9 U		0.9 U		0.9 U		0.180 U		P
Potassium	3.2 U	3.2 U		3.2 U		3.2 U		0.640 U		P
Selenium	2.4 U	2.4 U		2.4 U		2.4 U		0.480 U		P
Silver	1.8 U	1.8 U		1.8 U		1.8 U		0.360 U		P
Sodium	8.6 U	8.6 U		8.6 U		8.6 U		1.720 U		P
Thallium	1.6 U	1.6 U		1.6 U		1.6 U		0.320 U		P
Vanadium	4.2 U	4.2 U		4.2 U		4.2 U		0.840 U		P
Zinc	0.7 U	0.7 U		0.7 U		0.7 U		0.140 U		P

USEPA - CLP

3

BLANKS

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

Analyte	Initial Calib. Blank (ug/L)	Continuing Calibration Blank (ug/L)						Preparation Blank		M
		1	C	2	C	3	C	C		
Aluminum		29.8	B	7.8	B	9.7	B			P
Antimony		16.2	U	16.2	U	16.2	U			P
Arsenic		2.4	U	2.4	U	2.4	U			P
Barium		3.4	U	3.4	U	3.4	U			P
Beryllium		0.3	U	0.3	U	0.3	U			P
Cadmium		0.5	U	0.5	U	0.5	U			P
Calcium		6.9	U	6.9	U	6.9	U			P
Chromium		2.7	U	2.7	U	2.7	U			P
Cobalt		0.9	U	0.9	U	0.9	U			P
Copper		2.0	U	2.0	U	2.0	U			P
Iron		7.3	U	7.3	U	7.3	U			P
Lead		1.6	U	1.6	U	1.6	U			P
Magnesium		9.2	U	9.2	U	9.2	U			P
Manganese		0.3	U	0.3	U	0.3	U			P
Nickel		0.9	U	0.9	U	0.9	U			P
Potassium		3.2	U	3.2	U	3.2	U			P
Selenium		2.4	U	2.4	U	2.4	U			P
Silver		1.8	U	1.8	U	1.8	U			P
Sodium		8.9	B	25.7	B	24.2	B			P
Thallium		1.6	U	1.6	U	1.6	U			P
Vanadium		4.2	U	4.2	U	4.2	U			P
Zinc		0.7	U	0.7	U	0.7	U			P

USEPA - CLP

3

BLANKS

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

Analyte	Initial Calib. Blank (ug/L)	Continuing Calibration Blank (ug/L)						Preparation Blank	M
		1	2	3					
Aluminum		13.7	B						P
Antimony		16.2	U						P
Arsenic		2.4	U						P
Barium		3.4	U						P
Beryllium		0.3	U						P
Cadmium		0.5	U						P
Calcium		6.9	U						P
Chromium		2.7	U						P
Cobalt		0.9	U						P
Copper		2.0	U						P
Iron		7.3	U						P
Lead		1.6	U						P
Magnesium		9.2	U						P
Manganese		0.3	U						P
Nickel		0.9	U						P
Potassium		3.2	U						P
Selenium		2.4	U						P
Silver		1.8	U						P
Sodium		8.6	U						P
Thallium		1.6	U						P
Vanadium		4.2	U						P
Zinc		0.7	U						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

<u>Sample ID</u>	<u>Laboratory Sample ID</u>	<u>Date Received</u>	<u>VTSR</u>	<u>Matrix</u>
SD-7-SU-07-6	070622060-001	06/22/07	13:00	Soil
SD-7-SU-07-18	070622060-002	06/22/07	13:00	Soil
SD-8-SU-07-6	070622060-003	06/22/07	13:00	Soil
SD-8-SU-07-18	070622060-004	06/22/07	13:00	Soil
SD-9-SU-07-6	070622060-005	06/22/07	13:00	Soil
SD-9-SU-07-18	070622060-006	06/22/07	13:00	Soil
SD-10-SU-07-6	070622060-007	06/22/07	13:00	Soil
SD-10-SU-07-18	070622060-008	06/22/07	13:00	Soil
SD-11-SU-07-6	070622060-009	06/22/07	13:00	Soil
SD-11-SU-07-18	070622060-010	06/22/07	13:00	Soil
WM-1-SU-07-10	070622060-011	06/22/07	13:00	Soil
WM-2-SU-07-6	070622060-012	06/22/07	13:00	Soil
WM-3-SU-07-9	070622060-013	06/22/07	13:00	Soil
WM-4-SU-07-8	070622060-014	06/22/07	13:00	Soil

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."

A handwritten signature in blue ink, appearing to read "L. A. [unclear]", is written over a horizontal line.

Laboratory Manager

Date: 9/4/07



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CHAIN OF CUSTODY RECORD

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Client Name: Earth Science Engineering, P.C.		Address: 3721 Main Street, P.O. Box 398, Willsboro, NY 12996						
Send Report To: Douglas R. Ferris, P.E.		Project Name (Location): Black Ash Pond (Willsboro)			Samplers: (Names) DAUG & FERRIS			
Client Phone No: (518) 963-8133		Client Fax No: (518) 963-7490		PO Number: P-01-002I		Samplers: (Signature) <i>[Signature]</i>		
AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type Matrix	Comp	Grab	Number of Cont's	Analysis Required
001	SD-7-Su-07-6	6/21	8:00 P	Soil		✓		TAL Metals
002	SD-7-Su-07-18	"	8:00 P	Soil		✓		"
003	SD-8-Su-07-6	"	8:30 P	"		✓		"
004	SD-8-Su-07-18	"	8:30 P	"		✓		"
005	SD-9-Su-07-6	"	8:45 P	"		✓		"
006	SD-9-Su-07-18	"	8:45 P	"		✓		"
007	SD-10-Su-07-6	"	9:00 P	"		✓		"
008	SD-10-Su-07-18	"	9:00 P	"		✓		"
009	SD-11-Su-07-6	"	9:30 P	"		✓		"
	SD-11-Su-07-18	"	9:30 P	"		✓		"
010	MS2-SD-11-Su-07-18	"	9:30 P	"		✓		"
	MSD2-SD-11-Su-07-18	"	9:30 P	"		✓		"
			A					
			P					
			A					
			P					

AES Work Order #: 070622060		CC Report To / Special Instructions/Remarks:	
Turnaround Time Request: ☐ 1 Day ☐ 3 Day ☒ Normal ☐ 2 Day ☐ 5 Day			
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>[Signature]</i>	Date/Time 2:15 PM 6/21/07	
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>[Signature]</i>	Date/Time 6/21/07 3:00 PM	
Relinquished by: (Signature)	Received for Laboratory by: <i>[Signature]</i>	Date/Time 6/22/07 1:00 PM	
TEMPERATURE Ambient or Chilled Notes: 6°C	PROPERLY PRESERVED ☒ Y ☐ N Notes:	RECEIVED WITHIN HOLDING TIMES ☒ Y ☐ N Notes:	

WHITE - Lab Copy

YELLOW - Sampler Copy

PINK - Generator Copy

Adirondack Environmental Services, Inc.

: 00030



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2 of 2
CHAIN OF CUSTODY RECORD

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Client Name: Earth Science Engineering, P.C.		Address: 3721 Main Street, P.O. Box 378, Willsboro, NY 12996	
Send Report To: Douglas R. Ferris, P.E.		Project Name (Location): Black Ash Pond (Willsboro)	
Client Phone No: (518) 463-8133		Client Fax No: (518) 463-7490	
PO Number: P-01-002I		Samplers (Names): John M. Kanop	
Samplers (Signature): <i>[Signature]</i>			

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type			Number of Cont's	Analysis Required
				Matrix	Comp	Grab		
011	WM-1-Su-07-10	6/21	11:50	A			✓	TAL Metals
012	WM-2-Su-07-6	6/21	11:30	A			✓	"
013	WM-3-Su-07-9	6/21	11:35	A			✓	"
014	WM-4-Su-07-8	6/21	11:40	A			✓	"
	MS3-WM-4-Su-07-8	6/21	11:45	A			✓	"
	MSD3-WM-4-Su-07-8	6/21	11:50	A			✓	"
				A				
				P				
				A				
				P				
				A				
				P				
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				A				
				P				
				A				
				P				
				A				
				P				
				A				
				P				

AES Work Order #: 070622060		CC Report To / Special Instructions/Remarks:	
Turnaround Time Request: ☐ 1 Day ☐ 3 Day ☒ Normal ☐ 2 Day ☐ 5 Day			
Relinquished by: (Signature) <i>[Signature]</i> 6/21/07	Received by: (Signature) <i>[Signature]</i> 6/21/07	Date/Time 11:45	
Relinquished by: (Signature) <i>[Signature]</i> 6/21/07	Received by: (Signature) <i>[Signature]</i> 6/21/07	Date/Time 3:00	
Relinquished by: (Signature) <i>[Signature]</i> 6/21/07	Received for Laboratory by: <i>[Signature]</i> 6/22/07	Date/Time 1:00 pm	
TEMPERATURE Ambient or Chilled Notes: 6°C	PROPERLY PRESERVED Y N Notes:	RECEIVED WITHIN HOLDING TIMES Y N Notes:	

WHITE - Lab Copy

YELLOW - Sampler Copy

PINK - Generator Copy

Adirondack Environmental Services, Inc.

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CHAIN-OF-CUSTODY RECORD

(518) 434-4546

Earth Science Engineering, P.C.
24 South Main Street
Willsboro, NY 12996

WorkOrder: 070622060

Page 1 of 1

22-Jun-07

Sample ID	Client/SampID	Matrix	Collection Date	Bottle	Requested Tests						
					P	METALS	SO	ECURCY	SOI	P	MOIST
070622060-014	WM-4-SU-07-8	Soil	6/21/2007		A	A	A	A			
070622060-013	WM-3-SU-07-9	Soil	6/21/2007		A	A	A	A			
070622060-012	WM-2-SU-07-6	Soil	6/21/2007		A	A	A	A			
070622060-011	WM-1-SU-07-10	Soil	6/21/2007		A	A	A	A			
070622060-010	SD-11-SU-07-18	Soil	6/21/2007		A	A	A	A			
070622060-009	SD-11-SU-07-6	Soil	6/21/2007		A	A	A	A			
070622060-008	SD-10-SU-07-18	Soil	6/21/2007		A	A	A	A			
070622060-007	SD-10-SU-07-6	Soil	6/21/2007		A	A	A	A			
070622060-006	SD-9-SU-07-18	Soil	6/21/2007		A	A	A	A			
070622060-005	SD-9-SU-07-6	Soil	6/21/2007		A	A	A	A			
070622060-004	SD-8-SU-07-18	Soil	6/21/2007		A	A	A	A			
070622060-003	SD-8-SU-07-6	Soil	6/21/2007		A	A	A	A			
070622060-002	SD-7-SU-18	Soil	6/21/2007		A	A	A	A			
070622060-001	SD-7-SU-07-6	Soil	6/21/2007		A	A	A	A			

Date/Time	Date/Time
Received by: <u>W. Z. L. - 10/10/07</u>	Relinquished by: <u>[Signature]</u>
Received by: <u>Shirley - 10/10/07</u>	Relinquished by: <u>[Signature]</u>
Received by: _____	Relinquished by: _____

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.

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

INORGANIC - METALS

ANALYSIS

USEPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

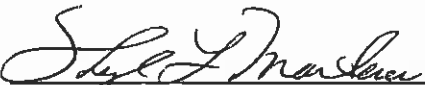
Lab Name: Adirondack Environmental Contract: Black Ash Pond
Lab Code: AES Case No.: ESE 0702 SAS No.: _____ SDG No.: SD-7-SU-07-
SOW No.: N/A

EPA Sample No.	Lab Sample ID.
<u>SD-7-SU-07-6</u>	<u>070622060-001A</u>
<u>SD-7-SU-07-18</u>	<u>070622060-002A</u>
<u>SD-8-SU-07-6</u>	<u>070622060-003A</u>
<u>SD-8-SU-07-18</u>	<u>070622060-004A</u>
<u>SD-9-SU-07-6</u>	<u>070622060-005A</u>
<u>SD-9-SU-07-18</u>	<u>070622060-006A</u>
<u>SD-10-SU-07-6</u>	<u>070622060-007A</u>
<u>SD-10-SU-07-18</u>	<u>070622060-008A</u>
<u>SD-11-SU-07-6</u>	<u>070622060-009A</u>
<u>SD-11-SU-07-18</u>	<u>070622060-010A</u>
<u>WM-1-SU-07-10</u>	<u>070622060-011A</u>
<u>WM-2-SU-07-6</u>	<u>070622060-012A</u>
<u>WM-3-SU-07-9</u>	<u>070622060-013A</u>
<u>WM-4-SU-07-8</u>	<u>070622060-014A</u>

Were ICP interelement corrections applied? Yes/No YES
Were ICP background corrections applied? Yes/No YES
If yes-were raw data generated before 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:  Name: Sheryl Martucci
Date: 9/4/07 Title: Inorganics Manager

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SD-7-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: 070622060-001A
 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	M
7429-90-5	Aluminum	2230		E	P
7440-36-0	Antimony	4.2	U		P
7440-38-2	Arsenic	0.62	U	N	P
7440-39-3	Barium	8.5	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
7440-70-2	Calcium	1470		E	P
7440-47-3	Chromium	0.70	U		P
7440-48-4	Cobalt	1.9	B		P
7440-50-8	Copper	0.64	B		P
7439-89-6	Iron	4520		E	P
7439-97-6	Mercury	0.04	U		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	B		P
7440-09-7	Potassium	86.2	B		P
7782-49-2	Selenium	0.62	U		P
7440-22-4	Silver	0.46	U		P
7440-23-5	Sodium	133	B		P
7440-28-0	Thallium	0.45	B	N	P
7440-62-2	Vanadium	5.7	B		P
7440-66-6	Zinc	13.1		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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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.: SD-7-SU-07-6

Matrix (soil/water): SOIL Lab Sample ID: 070622060-002A

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	M
7429-90-5	Aluminum	3380		E	P
7440-36-0	Antimony	4.1	U		P
7440-38-2	Arsenic	0.61	U	N	P
7440-39-3	Barium	12.4	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
7440-70-2	Calcium	2260		E	P
7440-47-3	Chromium	2.5	B		P
7440-48-4	Cobalt	2.6	B		P
7440-50-8	Copper	1.3	B		P
7439-89-6	Iron	6600		E	P
7439-97-6	Mercury	0.04	U		CV
7439-92-1	Lead	2.3			P
7439-95-4	Magnesium	1720		E	P
7439-96-5	Manganese	78.0		E	P
7440-02-0	Nickel	3.6	B		P
7440-09-7	Potassium	140	B		P
7782-49-2	Selenium	0.61	U		P
7440-22-4	Silver	0.46	U		P
7440-23-5	Sodium	188	B		P
7440-28-0	Thallium	0.41	U	N	P
7440-62-2	Vanadium	3.2	B		P
7440-66-6	Zinc	18.6		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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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.: SD-7-SU-07-6
 Matrix (soil/water): SOIL Lab Sample ID: 070622060-003A
 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	M
7429-90-5	Aluminum	2130		E	P
7440-36-0	Antimony	4.1	U		P
7440-38-2	Arsenic	0.61	U	N	P
7440-39-3	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
7440-70-2	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	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	U		P
7440-22-4	Silver	0.46	U		P
7440-23-5	Sodium	129	B		P
7440-28-0	Thallium	0.41	U	N	P
7440-62-2	Vanadium	5.1	B		P
7440-66-6	Zinc	12.9		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-8-SU-07-18

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0702 SAS No.: _____ SDG No.: SD-7-SU-07-6Matrix (soil/water): SOIL Lab Sample ID: 070622060-004ALevel (low/med): LOW Date Received: 6/22/2007% Solids: 77Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3920		E	P
7440-36-0	Antimony	4.2	U		P
7440-38-2	Arsenic	0.63	U	N	P
7440-39-3	Barium	22.0	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
7440-70-2	Calcium	2100		E	P
7440-47-3	Chromium	1.0	B		P
7440-48-4	Cobalt	3.3	B		P
7440-50-8	Copper	0.82	B		P
7439-89-6	Iron	8990		E	P
7439-97-6	Mercury	0.04	U		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		P
7440-09-7	Potassium	143	B		P
7782-49-2	Selenium	0.63	U		P
7440-22-4	Silver	0.47	U		P
7440-23-5	Sodium	172	B		P
7440-28-0	Thallium	0.42	U	N	P
7440-62-2	Vanadium	5.7	B		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

EPA SAMPLE NO.

SD-9-SU-07-6

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0702 SAS No.: _____ SDG No.: SD-7-SU-07-6Matrix (soil/water): SOIL Lab Sample ID: 070622060-005ALevel (low/med): LOW Date Received: 6/22/2007% Solids: 97Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3330		E	P
7440-36-0	Antimony	3.3	U		P
7440-38-2	Arsenic	0.50	U	N	P
7440-39-3	Barium	8.8	B		P
7440-41-7	Beryllium	0.06	U		P
7440-42-8	Boron	1.5	U		P
7440-43-9	Cadmium	0.10	U		P
7440-70-2	Calcium	2320		E	P
7440-47-3	Chromium	1.0	B		P
7440-48-4	Cobalt	1.9	B		P
7440-50-8	Copper	0.52	B		P
7439-89-6	Iron	5050		E	P
7439-97-6	Mercury	0.03	U		CV
7439-92-1	Lead	1.2			P
7439-95-4	Magnesium	1020	B	E	P
7439-96-5	Manganese	47.1		E	P
7440-02-0	Nickel	1.9	B		P
7440-09-7	Potassium	150	B		P
7782-49-2	Selenium	0.50	U		P
7440-22-4	Silver	0.37	U		P
7440-23-5	Sodium	283	B		P
7440-28-0	Thallium	0.33	U	N	P
7440-62-2	Vanadium	2.3	B		P
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 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: 070622060-006A
 Level (low/med): LOW Date Received: 6/22/2007
 % Solids: 77

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3900		E	P
7440-36-0	Antimony	4.2	U		P
7440-38-2	Arsenic	0.63	U	N	P
7440-39-3	Barium	13.1	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
7440-70-2	Calcium	2130		E	P
7440-47-3	Chromium	1.0	B		P
7440-48-4	Cobalt	2.6	B		P
7440-50-8	Copper	0.52	B		P
7439-89-6	Iron	7950		E	P
7439-97-6	Mercury	0.04	U		CV
7439-92-1	Lead	0.42	U		P
7439-95-4	Magnesium	983	B	E	P
7439-96-5	Manganese	90.8		E	P
7440-02-0	Nickel	2.2	B		P
7440-09-7	Potassium	131	B		P
7782-49-2	Selenium	0.63	U		P
7440-22-4	Silver	0.47	U		P
7440-23-5	Sodium	400	B		P
7440-28-0	Thallium	0.42	U	N	P
7440-62-2	Vanadium	4.3	B		P
7440-66-6	Zinc	14.6		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SD-10-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: 070622060-007A
 Level (low/med): LOW Date Received: 6/22/2007
 % Solids: 77

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4950		E	P
7440-36-0	Antimony	4.2	U		P
7440-38-2	Arsenic	0.63	U	N	P
7440-39-3	Barium	8.5	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
7440-70-2	Calcium	3390		E	P
7440-47-3	Chromium	1.8	B		P
7440-48-4	Cobalt	2.2	B		P
7440-50-8	Copper	1.0	B		P
7439-89-6	Iron	5050		E	P
7439-97-6	Mercury	0.04	U		CV
7439-92-1	Lead	0.42	U		P
7439-95-4	Magnesium	1030	B	E	P
7439-96-5	Manganese	36.6		E	P
7440-02-0	Nickel	3.1	B		P
7440-09-7	Potassium	136	B		P
7782-49-2	Selenium	0.63	U		P
7440-22-4	Silver	0.47	U		P
7440-23-5	Sodium	526	B		P
7440-28-0	Thallium	0.42	U	N	P
7440-62-2	Vanadium	1.1	U		P
7440-66-6	Zinc	11.0		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SD-10-SU-07-18

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0702 SAS No.: _____ SDG No.: SD-7-SU-07-6Matrix (soil/water): SOIL Lab Sample ID: 070622060-008ALevel (low/med): LOW Date Received: 6/22/2007% Solids: 77Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3620		E	P
7440-36-0	Antimony	4.2	U		P
7440-38-2	Arsenic	0.62	U	N	P
7440-39-3	Barium	10.1	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
7440-70-2	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		P
7439-89-6	Iron	5580		E	P
7439-97-6	Mercury	0.04	U		CV
7439-92-1	Lead	0.66	B		P
7439-95-4	Magnesium	1350		E	P
7439-96-5	Manganese	45.7		E	P
7440-02-0	Nickel	2.9	B		P
7440-09-7	Potassium	171	B		P
7782-49-2	Selenium	0.62	U		P
7440-22-4	Silver	0.47	U		P
7440-23-5	Sodium	314	B		P
7440-28-0	Thallium	0.41	U	N	P
7440-62-2	Vanadium	2.7	B		P
7440-66-6	Zinc	14.9		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

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): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	3890		E	P
7440-36-0	Antimony	4.9	B		P
7440-38-2	Arsenic	0.68	B	N	P
7440-39-3	Barium	9.9	B		P
7440-41-7	Beryllium	0.08	U		P
7440-42-8	Boron	2.0	U		P
7440-43-9	Cadmium	0.13	U		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	U		P
7439-89-6	Iron	7090		E	P
7439-97-6	Mercury	0.04	U		CV
7439-92-1	Lead	0.79	B		P
7439-95-4	Magnesium	1480		E	P
7439-96-5	Manganese	59.6		E	P
7440-02-0	Nickel	3.1	B		P
7440-09-7	Potassium	161	B		P
7782-49-2	Selenium	0.64	U		P
7440-22-4	Silver	0.48	U		P
7440-23-5	Sodium	311	B		P
7440-28-0	Thallium	0.43	U	N	P
7440-62-2	Vanadium	3.1	B		P
7440-66-6	Zinc	17.3		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SD-11-SU-07-18

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: 070622060-010A
 Level (low/med): LOW Date Received: 6/22/2007
 % Solids: 77

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	4480		E	P
7440-36-0	Antimony	4.2	U		P
7440-38-2	Arsenic	0.63	U	N	P
7440-39-3	Barium	21.3	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
7440-70-2	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		P
7439-89-6	Iron	5230		E	P
7439-97-6	Mercury	0.04	U		CV
7439-92-1	Lead	0.44	B		P
7439-95-4	Magnesium	1190	B	E	P
7439-96-5	Manganese	37.3		E	P
7440-02-0	Nickel	2.7	B		P
7440-09-7	Potassium	181	B		P
7782-49-2	Selenium	0.63	U		P
7440-22-4	Silver	0.47	U		P
7440-23-5	Sodium	483	B		P
7440-28-0	Thallium	0.42	U	N	P
7440-62-2	Vanadium	1.1	B		P
7440-66-6	Zinc	17.6		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-2-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: 070622060-012A
 Level (low/med): LOW Date Received: 6/22/2007
 % Solids: 80

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	1890		E	P
7440-36-0	Antimony	4.1	U		P
7440-38-2	Arsenic	8.1		N	P
7440-39-3	Barium	40.3	B		P
7440-41-7	Beryllium	0.30	B		P
7440-42-8	Boron	1.9	U		P
7440-43-9	Cadmium	0.15	B		P
7440-70-2	Calcium	1090	B	E	P
7440-47-3	Chromium	6.2			P
7440-48-4	Cobalt	4.8	B		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	B	E	P
7439-96-5	Manganese	39.3		E	P
7440-02-0	Nickel	12.9			P
7440-09-7	Potassium	148	B		P
7782-49-2	Selenium	1.6			P
7440-22-4	Silver	0.45	U		P
7440-23-5	Sodium	42.7	B		P
7440-28-0	Thallium	0.40	U	N	P
7440-62-2	Vanadium	18.2			P
7440-66-6	Zinc	13.1		E	P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

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INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

WM-3-SU-07-9

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: 070622060-013A
 Level (low/med): LOW Date Received: 6/22/2007
 % Solids: 71

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

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum	20200		E	P
7440-36-0	Antimony	4.6	U		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	U		P
7440-43-9	Cadmium	0.29	B		P
7440-70-2	Calcium	10400		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	P
7439-97-6	Mercury	0.99			CV
7439-92-1	Lead	13.8			P
7439-95-4	Magnesium	1480		E	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	U		P
7440-22-4	Silver	0.51	U		P
7440-23-5	Sodium	236	B		P
7440-28-0	Thallium	0.45	U	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: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

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): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
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
7440-70-2	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
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

Color Before: _____ Clarity Before: _____ Texture: _____
 Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0702 SAS No.: SDG No.: SD-7-SU-07-6Initial Calibration Source: EPA-ICVContinuing Calibration Source: EPA-LV

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
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	1970.37	98.5	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	P
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	109.8	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

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0702 SAS No.: _____ SDG No.: SD-7-SU-07-6Initial Calibration Source: EPA-ICVContinuing Calibration Source: EPA-LV

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				2000.0	2174.92	108.7	2156.37	107.8	P
Antimony				2000.0	1968.36	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				2000.0	2092.55	104.6	2059.58	103.0	P
Cadmium				2000.0	2130.92	106.5	2113.00	105.6	P
Calcium				2000.0	2115.56	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	1969.53	98.5	2020.47	101.0	P
Iron				2000.0	2135.79	106.8	2097.24	104.9	P
Mercury				2.0	1.85	92.5			CV
Lead				2000.0	2199.19	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	2190.65	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

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0702 SAS No.: _____ SDG No.: SD-7-SU-07-6Initial Calibration Source: EPA-ICVContinuing Calibration Source: EPA-LV

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				2000.0	2167.37	108.4	2146.32	107.3	P
Antimony				2000.0	1963.59	98.2	1974.77	98.7	P
Arsenic				2000.0	2029.21	101.5	2003.89	100.2	P
Barium				2000.0	2071.92	103.6	2051.46	102.6	P
Beryllium				2000.0	2051.85	102.6	2037.37	101.9	P
Cadmium				2000.0	2130.77	106.5	2110.60	105.5	P
Calcium				2000.0	2038.19	101.9	2019.03	101.0	P
Chromium				2000.0	2012.09	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	P
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	P
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

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0702 SAS No.: _____ SDG No.: SD-7-SU-07-6Initial Calibration Source: EPA-ICVContinuing Calibration Source: EPA-LV

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				2000.0	2117.47	105.9			P
Antimony				2000.0	1986.61	99.3			P
Arsenic				2000.0	2000.72	100.0			P
Barium				2000.0	2043.62	102.2			P
Beryllium				2000.0	2028.87	101.4			P
Cadmium				2000.0	2105.54	105.3			P
Calcium				2000.0	2017.08	100.9			P
Chromium				2000.0	1996.30	99.8			P
Cobalt				2000.0	2043.56	102.2			P
Copper				2000.0	2010.20	100.5			P
Iron				2000.0	2079.37	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			P
Potassium				10000.0	9678.26	96.8			P
Selenium				2000.0	2002.97	100.1			P
Silver				500.0	487.67	97.5			P
Sodium				2000.0	1817.31	90.9			P
Thallium				2000.0	1986.57	99.3			P
Vanadium				2000.0	1996.16	99.8			P
Zinc				2000.0	2042.23	102.1			P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

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

AA CRDL Standard Source: _____

ICP CRDL Standard Source: INOR-VEN

Concentration Units: ug/L

Analyte				CRDL Standard for ICP				
	True	Found	%R	Initial True	Initial Found	Initial %R	Final Found	Final %R
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				40.0	40.78	102.0	37.03	92.6

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

USEPA - CLP

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)		Continuing Calibration Blank (ug/L)						Preparation Blank		M
	C		1	C	2	C	3	C	C		
Aluminum	15.1	B	17.9	B	9.2	B	8.3	B	4.670	B	P
Antimony	16.2	U	16.2	U	16.2	U	16.2	U	3.240	U	P
Arsenic	2.4	U	2.4	U	2.4	U	2.4	U	0.480	U	P
Barium	3.4	U	3.4	U	3.4	U	3.4	U	0.680	U	P
Beryllium	0.3	U	0.3	U	0.3	U	0.3	U	0.060	U	P
Cadmium	0.5	U	0.5	U	0.5	U	0.5	U	0.100	U	P
Calcium	6.9	U	6.9	U	6.9	U	6.9	U	1.380	U	P
Chromium	2.7	U	2.7	U	2.7	U	2.7	U	0.540	U	P
Cobalt	0.9	U	0.9	U	0.9	U	0.9	U	0.180	U	P
Copper	2.0	U	2.0	U	2.0	U	2.0	U	0.400	U	P
Iron	7.3	U	12.5	B	7.3	U	7.3	U	1.460	U	P
Mercury	0.06	U	0.06	U	0.06	U	0.06	U	0.030	U	CV
Lead	1.6	U	1.6	U	1.6	U	1.6	U	0.320	U	P
Magnesium	9.2	U	9.2	U	9.2	U	9.2	U	1.840	U	P
Manganese	0.3	U	0.3	U	0.3	U	0.3	U	0.060	U	P
Nickel	0.9	U	0.9	U	0.9	U	0.9	U	0.180	U	P
Potassium	3.2	U	3.2	U	3.2	U	3.2	U	0.640	U	P
Selenium	2.4	U	2.4	U	2.4	U	2.4	U	0.480	U	P
Silver	1.8	U	1.8	U	1.8	U	1.8	U	0.360	U	P
Sodium	8.6	U	8.6	U	8.6	U	8.6	U	1.720	U	P
Thallium	1.6	U	1.6	U	1.6	U	1.6	U	0.320	U	P
Vanadium	4.2	U	4.2	U	4.2	U	4.2	U	0.840	U	P
Zinc	0.7	U	0.7	U	0.7	U	0.7	U	0.140	U	P

USEPA - CLP

3

BLANKS

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

Analyte	Initial Calib. Blank (ug/L)	Continuing Calibration Blank (ug/L)						Preparation Blank	M
		1	C	2	C	3	C		
Aluminum		29.8	B	7.8	B	9.7	B		P
Antimony		16.2	U	16.2	U	16.2	U		P
Arsenic		2.4	U	2.4	U	2.4	U		P
Barium		3.4	U	3.4	U	3.4	U		P
Beryllium		0.3	U	0.3	U	0.3	U		P
Cadmium		0.5	U	0.5	U	0.5	U		P
Calcium		6.9	U	6.9	U	6.9	U		P
Chromium		2.7	U	2.7	U	2.7	U		P
Cobalt		0.9	U	0.9	U	0.9	U		P
Copper		2.0	U	2.0	U	2.0	U		P
Iron		7.3	U	7.3	U	7.3	U		P
Lead		1.6	U	1.6	U	1.6	U		P
Magnesium		9.2	U	9.2	U	9.2	U		P
Manganese		0.3	U	0.3	U	0.3	U		P
Nickel		0.9	U	0.9	U	0.9	U		P
Potassium		3.2	U	3.2	U	3.2	U		P
Selenium		2.4	U	2.4	U	2.4	U		P
Silver		1.8	U	1.8	U	1.8	U		P
Sodium		8.9	B	25.7	B	24.2	B		P
Thallium		1.6	U	1.6	U	1.6	U		P
Vanadium		4.2	U	4.2	U	4.2	U		P
Zinc		0.7	U	0.7	U	0.7	U		P

USEPA - CLP

3

BLANKS

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

Analyte	Initial Calib. Blank (ug/L)	Continuing Calibration Blank (ug/L)						Preparation Blank	C	M
		1	C	2	C	3	C			
Aluminum		13.7	B							P
Antimony		16.2	U							P
Arsenic		2.4	U							P
Barium		3.4	U							P
Beryllium		0.3	U							P
Cadmium		0.5	U							P
Calcium		6.9	U							P
Chromium		2.7	U							P
Cobalt		0.9	U							P
Copper		2.0	U							P
Iron		7.3	U							P
Lead		1.6	U							P
Magnesium		9.2	U							P
Manganese		0.3	U							P
Nickel		0.9	U							P
Potassium		3.2	U							P
Selenium		2.4	U							P
Silver		1.8	U							P
Sodium		8.6	U							P
Thallium		1.6	U							P
Vanadium		4.2	U							P
Zinc		0.7	U							P

USEPA - CLP

4

ICP INTERFERENCE CHECK 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

ICP ID Number: ICP4 ICS Source: EPA

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	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		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	83.8		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		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

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

WM-4-SU-07-BMS

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0702 SAS No.: _____ SDG No.: SD-7-SU-07-6Matrix (soil/water): SOIL Level (low/mad): LOW% Solids for Sample: 79.9Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		5233.2090		3501.9880		500.63	345.8		P
Antimony	75 - 125	95.2709		4.0551	U	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	B	12.52	106.3		P
Cadmium	75 - 125	12.4917		0.1841	B	12.52	98.3		P
Calcium		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	B	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		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	B	395.4205	B	0.00	0.0		P
Manganese	75 - 125	206.0908		87.8974		125.16	94.4		P
Nickel	75 - 125	139.1987		8.3549	B	125.16	104.5		P
Potassium		285.7538	B	222.1849	B	0.00	0.0		P
Selenium	75 - 125	5.1258		2.0348		2.50	123.6		P
Silver	75 - 125	10.1764		0.4506	U	12.52	81.3		P
Sodium		110.6404	B	87.5442	B	0.00	0.0		P
Thallium	75 - 125	9.1551		0.4005	U	12.52	73.1	N	P
Vanadium	75 - 125	145.9158		11.7733	B	125.16	107.2		P
Zinc	75 - 125	144.8144		15.9789		125.16	102.9		P

Comments:

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

SD-11-SU-07-18MS

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0702 SAS No.: _____ SDG No.: SD-7-SU-07-6Matrix (soil/water): SOILLevel (low/med): LOW% Solids for Sample: 76.6Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR) C	Sample Result (SR) C	Spike Added (SA)	%R	Q	M
Mercury	75 - 125	1.3185	0.0392 U	1.31	100.6		CV

Comments:

USEPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

WM-4-SU-07-8A

Lab Name: Adirondack EnvironmentalContract: Black Ash PondLab Code: AESCase No.: ESE 0702

SAS No.: _____

SDG No.: SD-7-SU-07-6Matrix (soil/water): SOILLevel (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		4469.34		3501.99		1001.3	96.6		P
Antimony		250.17		4.06	U	250.3	99.9		P
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	B	25.0	105.2		P
Cadmium		25.94		0.18	B	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	B	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	B	395.42	B	0.0	0.0		P
Manganese		344.44		87.90		250.3	102.5		P
Nickel		281.57		8.35	B	250.3	109.2		P
Potassium		223.94	B	222.18	B	0.0	0.0		P
Selenium		7.47		2.03		5.0	108.8		P
Silver		22.64		0.45	U	25.0	90.6		P
Sodium		87.97	B	87.54	B	0.0	0.0		P
Thallium		22.52		0.40	U	25.0	90.1		P
Vanadium		271.39		11.77	B	250.3	103.7		P
Zinc		280.56		15.98		250.3	105.7		P

Comments: _____

USEPA - CLP

6

DUPLICATES

SAMPLE NO.

WM-4-SU-07-8DP

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

% Solids for Sample: 79.9 % Solids for Duplicate: 79.9

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		3501.9880		3564.0130		1.8		P
Antimony		4.0551	U	4.0551	U			P
Arsenic	2.5	8.3660		7.7199		8.0		P
Barium	50.1	50.6962		51.2038		1.0		P
Beryllium		0.5753	B	0.5724	B	0.5		P
Cadmium		0.1841	B	0.2055	B	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	B	3.1865	B	5.5		P
Copper	6.3	16.8132		17.1397		1.9		P
Iron		4364.2840		4282.2760		1.9		P
Mercury	0.1	0.3066		0.4130		29.6		CV
Lead		18.2054		17.2588		5.3		P
Magnesium		395.4205	B	397.7073	B	0.6		P
Manganese		87.8974		83.1527		5.5		P
Nickel		8.3549	B	7.9350	B	5.2		P
Potassium		222.1849	B	224.7243	B	1.1		P
Selenium	1.3	2.0348		1.5317		28.2		P
Silver		0.4506	U	0.4506	U			P
Sodium		87.5442	B	87.6892	B	0.2		P
Thallium		0.4005	U	0.6755	B	200.0		P
Vanadium		11.7733	B	11.7738	B	0.0		P
Zinc	5.0	15.9789		15.1019		5.6		P

USEPA - CLP

6

DUPLICATES

SAMPLE NO.

SD-11-SU-07-18DP

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
% Solids for Sample: 76.6 % Solids for Duplicate: 76.6

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

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Mercury		0.0392	U	0.0392	U			CV

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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: _____

Analyte	Aqueous (ug/L)			Solid (mg/kg)					
	True	Found	%R	True	Found	C	Limits	%R	
Aluminum				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				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				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				83.0	75.60		101.0 166.0	91.1	
Zinc				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.	An	0 ADD ABS	1 ADD		2 ADD		3 ADD		Final Conc.	r	Q
			CON	ABS	CON	ABS	CON	ABS			

USEPA - CLP

9

ICP SERIAL DILUTIONS

SAMPLE NO.

WM-4-SU-07-8L

Lab Name: Adirondack EnvironmentalContract: Black Ash PLab Code: AESCase No.: ESE 0702

SAS No.: _____

SDG No.: SD-7-SU-07-6Matrix (soil/water): SOILLevel (low/med): LOWConcentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ- ence	Q	M
Aluminum	13990.44		15473.84		10.6	E	P
Antimony	3.70	B	173.81	B	4597.6		P
Arsenic	33.42		48.33	B	44.6		P
Barium	202.53		215.65	B	6.5		P
Beryllium	2.30		2.43	B	5.7		P
Boron	7.40	U	37.00	U			P
Cadmium	0.74	B	2.50	U	100.0		P
Calcium	9323.54		10298.19	B	10.5	E	P
Chromium	23.41		16.57	B	29.2		P
Cobalt	13.46		16.41	B	21.9		P
Copper	67.17		78.72	B	17.2		P
Iron	17435.31		20784.07		19.2	E	P
Lead	72.73		68.56		5.7		P
Magnesium	1579.70		1788.60	B	13.2	E	P
Manganese	351.15		395.46		12.6	E	P
Nickel	33.38		39.40	B	18.0		P
Potassium	887.63	B	827.98	B	6.7		P
Selenium	8.13		12.67	B	55.8		P
Silver	1.80	U	9.00	U			P
Sodium	349.74	B	302.43	B	13.5		P
Thallium	1.50	B	8.07	B	438.0		P
Vanadium	47.03		69.97	B	48.8		P
Zinc	63.84		73.99	B	15.9	E	P

USEPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0702 SAS No.: _____ SDG No.: SD-7-SU-07-6ICP ID Number: _____ Date: 2/6/2007Flame AA ID Number: CVAA

Furnace AA ID Number: _____

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

Comments: _____

USEPA - CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: Adirondack EnvironmentalContract: Black Ash PondLab Code: AES Case No.: ESE 0702

SAS No.: _____

SDG No.: SD-7-SU-07-6ICP ID Number: ICP4Date: 2/6/2007

Flame AA ID Number: _____

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.22		200	5.2	P
Antimony	206.83		60	16.2	P
Arsenic	189.04		10	2.4	P
Barium	493.41		200	3.4	P
Beryllium	313.04		5	0.3	P
Boron	249.68		50	7.4	P
Cadmium	226.50		5	0.5	P
Calcium	317.93		5000	6.9	P
Chromium	267.72		10	2.7	P
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	P
Selenium	196.02		5	2.4	P
Silver	328.07		10	1.8	P
Sodium	588.9		5000	8.6	P
Thallium	190.86		10	1.6	P
Vanadium	292.40		50	4.2	P
Zinc	206.2		20	0.7	P

Comments: _____

USEPA - CLP

11A

ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0702 SAS No.: SDG No.: SD-7-SU-07ICP ID Number: ICP4 Date: 4/5/2007

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	Rh
Aluminum	308.20	0.0000000	0.0000000	0.0000000	0.0000000	
Antimony	206.80	0.0000000	0.0000000	0.0000000	0.0000000	
Arsenic	193.70	0.0001270	0.0000000	0.0000000	0.0000000	
Barium	493.40	0.0000000	0.0000000	0.0000000	0.0000000	
Beryllium	313.00	0.0000000	0.0000000	0.0000000	0.0000000	
Cadmium	228.80	0.0000000	0.0000000	0.0000000	0.0000000	
Calcium	317.90	0.0000000	0.0000000	0.0000000	0.0000000	
Chromium	357.80	0.0000000	0.0000000	0.0001400	0.0000000	
Cobalt	228.60	0.0000000	0.0000000	0.0000000	0.0000000	
Copper	324.70	0.0000000	0.0000000	0.0000000	0.0000000	
Iron	259.90	0.0001900	0.0000000	0.0000000	0.0000000	
Lead	220.30	0.0001020	0.0000000	0.0008420	0.0000000	
Magnesium	383.80	0.0000000	0.0000000	0.0000000	0.0000000	
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	
Selenium	196.00	0.0000000	0.0000000	0.0000000	0.0000000	
Silver	328.00	0.0000000	0.0000000	0.0000000	0.0000000	
Sodium	588.90	0.0000000	0.0000000	0.0000000	0.0000000	
Thallium	190.80	0.0000000	0.0008600	0.0000000	0.0000000	
Tin	189.90	0.0000000	0.0000000	0.0000000	0.0000000	
Vanadium	292.40	0.0006000	0.0000000	0.0000000	0.0000000	
Zinc	213.80	0.0000000	0.0000000	0.0001040	0.0000000	

Comments: _____

USEPA - CLP

12

ICP LINEAR RANGES (QUARTERLY)

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0702 SAS No.: _____ SDG No.: SD-7-SU-07-6ICP ID Number: ICP4 Date: 2/10/2007

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

Comments: _____

USEPA - CLP

13

PREPARATION LOG

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0702 SAS No.: _____ SDG No.: SD-7-SU-07-6Method: 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-07-8	6/29/2007	1.00	200.0
WM-4-SU-07-8DP	6/29/2007	1.00	200.0
WM-4-SU-07-8MS	6/29/2007	1.00	200.0

USEPA - CLP

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PREPARATION LOG

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0702 SAS No.: _____ SDG No.: SD-7-SU-07-6Method: CV

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

USEPA - CLP

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ANALYSIS RUN LOG

Lab Name: Adirondack EnvironmentalContract: Black Ash PondLab Code: AESCase No.: ESE 0702

SAS No.: _____

SDG No.: SD-7-SU-07-6Instrument ID Number: ICP4Method: PStart Date: 7/18/2007End Date: 7/18/2007

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	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	X	X	X	X	X	X	X	X	X	X	*	
200.7-1	1.00	1041		X					X					X			X	X			X					X			
200.7-2	1.00	1045					X	X				X	X	X		X													
200.7-3	1.00	1049							X					X										X				*	
200.7-4	1.00	1101			X																								
1 PPM AG	1.00	1110																			X								
200.7	1.00	1114				X					X									X					X				
ICV-1	1.00	1139		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ICB-1	1.00	1140		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CRI-1	1.00	1145			X	X		X	X		X	X	X		X		X		X	X		X	X	X	X	X			
ICSA-1	1.00	1150		X					X				X	X															
ICSAB-1	1.00	1202		X			X	X	X	X	X	X	X	X	X	X	X	X		X		X			X	X			
CCV-1	1.00	1207		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCB-1	1.00	1211		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCV-2	1.00	1403		X	X	X	X	X	X	X	X	X	X	X	X	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	X	X		
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	X	X	X		
CCB-3	1.00	1515		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCV-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	X	X		
CCB-4	1.00	1606		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
MBLK, IS	1.00	1613		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
LCS-S, IS	1.00	1627		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
SD-7-SU-07-6	1.00	1631		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
SD-7-SU-07-18	1.00	1636		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
SD-8-SU-07-6	1.00	1640		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
SD-8-SU-07-18	1.00	1644		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
SD-9-SU-07-6	1.00	1651		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
SD-9-SU-07-18	1.00	1658		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
SD-10-SU-07-6	1.00	1702		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
SD-10-SU-07-18	1.00	1710		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCV-5	1.00	1714		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCB-5	1.00	1723		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
SD-11-SU-07-6	1.00	1726		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
SD-11-SU-07-18	1.00	1730		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
WM-1-SU-07-10	1.00	1736		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
WM-2-SU-07-6	1.00	1740		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
WM-3-SU-07-9	1.00	1745		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
WM-4-SU-07-8	1.00	1750		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		

USEPA - CLP

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ANALYSIS RUN LOG

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

EPA Sample No.	D/F	Time	% R	Analytes																											
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S G	A L	N T	T 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		X	X	X	X	X	X	X	X						
WM-4-SU-07-8MS	1.00	1758		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
WM-4-SU-07-8A	1.00	1802		X	X	X	X	X	X	X	X	X	X	X	X	X		X	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		X	X	X	X	X	X	X	X						
CCV-6	1.00	1810		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCB-6	1.00	1814		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CRI-2	1.00	1818			X	X		X	X		X	X	X		X		X		X	X		X	X	X							
ICSA-2	1.00	1822		X					X				X		X																
ICSAB-2	1.00	1826		X			X	X	X	X	X	X	X	X	X	X		X			X			X	X						
CCV-7	1.00	1830		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						
CCB-7	1.00	1833		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X						

USEPA - CLP

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ANALYSIS RUN LOG

Lab Name: Adirondack EnvironmentalContract: Black Ash PondLab Code: AESCase No.: ESE 0702

SAS No.: _____

SDG No.: SD-7-SU-07-6Instrument ID Number: CVAAMethod: CVStart Date: 7/2/2007End Date: 7/2/2007

EPA Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	A G	N A	T L	V	Z N	C N
ICV	1.00	1504															X										
ICB	1.00	1508															X										
PB	1.00	1513															X										
LCSS	5.00	1515															X										
SD-7-SU-07-6	1.00	1515															X										
SD-7-SU-07-18	1.00	1518															X										
SD-8-SU-07-6	1.00	1520															X										
SD-8-SU-07-18	1.00	1522															X										
SD-9-SU-07-6	1.00	1523															X										
SD-9-SU-07-18	1.00	1525															X										
CCV	1.00	1527															X										
CCB	1.00	1528															X										
SD-10-SU-07-6	1.00	1530															X										
SD-10-SU-07-18	1.00	1532															X										
SD-11-SU-07-6	1.00	1534															X										
SD-11-SU-07-18	1.00	1535															X										
SD-11-SU-07-18DP	1.00	1537															X										
SD-11-SU-07-18MS	1.00	1539															X										
WM-1-SU-07-10	1.00	1541															X										
WM-2-SU-07-6	1.00	1542															X										
WM-3-SU-07-9	1.00	1544															X										
WM-4-SU-07-8	1.00	1546															X										
CCV	1.00	1547															X										
CCB	1.00	1549															X										
WM-4-SU-07-8DP	1.00	1551															X										
WM-4-SU-07-8MS	1.00	1552															X										
CCV	1.00	1608															X										
CCB	1.00	1609															X										

RAW QC

DATA

Method: SPEX Sample Name: Blank Operator:
 Comment:
 Run Time: 07/18/07 10:37 Type: Std Mode: IR 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	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.0263	.3685	.0430	.1083	-.0997
Stddev	.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

Elem	B 2496	Ba4934	Be3130	Bi1902	Ca3179
Line	249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1691	2.441	.7578	.0219	-.0208
Stddev	.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

Elem	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
Line	228.802 {147}	228.616 {147}	357.869 { 94}	324.754 {103}	259.940 {129}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0796	.0105	.0554	.1787	.5702
Stddev	.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

Elem	Ge2068	In2306	K 7664	Li6103	Mg3838
Line	206.866 {162}	230.606 {146}	766.490 { 44}	610.362 { 55}	383.826 { 87}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.1247	.0268	1.643	-37.40	-.0346
Stddev	.0070	.0004	.196	.29	.0098
RSD	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

Sample Name: Blank Run Time: 07/18/07 10:37

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.3076	.0373	.0321	.0997	.0133
Stddev	.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

Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0224	.1213	-.0299	.0429	-.0238
Stddev	.0035	.0214	.0074	.0059	.0109
%RSD	15.70	17.62	24.78	13.70	45.93

#1	-.0249	.1364	-.0352	.0388	-.0160
#2	-.0200	.1061	-.0247	.0471	-.0315

Elem	V_2924	W_2397	Zn2138	Zr3391
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}
Units	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

Method: SPEX

Sample Name: 200.7-1

Operator:

Comment:

Run Time: 07/18/07 10:41 Type: Std

Mode: IR

Corr.Fact: 1.000000

Elem	Al3082	Al3961	Ca3179	K_7664	Mg3838
Line	308.215 {109}	396.152 { 85}	317.933 {105}	766.490 { 44}	383.826 { 87}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
avg	30.64	218.7	191.8	1249.	100.7
stddev	.19	.3	.5	8.	.2
RSD	.6328	.1213	.2754	.6536	.2193

#1	30.78	218.8	192.2	1255.	100.9
#2	30.51	218.5	191.4	1243.	100.6

Elem	Na5889	Na5895	Ni2316	Zn2138
Line	588.995 { 57}	589.592 { 57}	231.604 {145}	213.856 {157}
Units	Cts/S	Cts/S	Cts/S	Cts/S
avg	8698.	4683.	1080.	2851.
stddev	1.	5.	1.	2.
RSD	.0121	.1000	.0992	.0745

#1	8699.	4686.	1079.	2849.
#2	8697.	4679.	1081.	2852.

Method: SPEX

Sample Name: 200.7-2

Operator:

Comment:

Run Time: 07/18/07 10:45 Type: Std

Mode: IR

Corr.Fact: 1.000000

Elem	Ba4934	Be3130	Co2286	Cu3247	Fe2599
Line	493.409 { 68}	313.042 {107}	228.616 {147}	324.754 {103}	259.940 {129}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1853.	1058.	643.3	39.59	5117.
Stddev	8.	1.	.7	.11	20.
RSD	.4426	.0979	.1116	.2720	.3921

#1	1847.	1058.	642.8	39.66	5103.
#2	1859.	1059.	643.8	39.51	5132.

Elem	Mn2576	Sr3464
Line	257.610 {131}	346.446 { 97}
Units	Cts/S	Cts/S
Avg	1859.	177.4
Stddev	1.	.1
RSD	.0534	.0363

#1	1859.	177.3
#2	1860.	177.4

Method: SPEX Sample Name: 200.7-3

Operator:

Comment:

Run Time: 07/18/07 10:49 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	B 2496	Cd2288	Pb2203	Tl1908
Line	249.678 {135}	228.802 {147}	220.353 {152}	190.864 {176}
Units	Cts/S	Cts/S	Cts/S	Cts/S
avg	30.01	198.8	33.21	10.50
Stddev	.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

Method: SPEX

Sample Name: 200.7-4

Operator:

Comment:

Run Time: 07/18/07 11:01 Type: Std

Mode: IR

Corr.Fact: 1.000000

Elem	Mo2020	Sb2068	Ti3361
Line	202.030 {166}	206.833 {162}	336.121 {100}
Units	Cts/S	Cts/S	Cts/S
Avg	1124.	226.8	641.1
Stddev	17.	6.5	1.8
%RSD	1.517	2.863	.2757
#1	1112.	222.2	642.4
#2	1136.	231.4	639.9

Method: SPEX Sample Name: 1 PPM AG

Operator:

Comment:

Run Time: 07/18/07 11:10 Type: Std Mode: IR Corr.Fact: 1.000000

Wavelength	Ag3280
Wavenumber	328.068 {102}
Intensity	Cts/S
Average	32.32
Stddev	.00
RSD	.0065

#1	32.32
#2	32.32

Method: SPEX Sample Name: 200.7

Operator:

Comment:

Run Time: 07/18/07 11:14 Type: Std Mode: IR Corr.Fact: 1.000000

	As1937	Cr3578	Li6103	Se1960	Sn1899
line	193.759 {173}	357.869 { 94}	610.362 { 55}	196.090 {171}	189.989 {176}
units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
avg	33.30	34.28	413.6	28.27	72.87
stddev	.03	.02	.5	.19	.34
RSD	.0995	.0535	.1251	.6852	.4723

1	33.28	34.27	414.0	28.13	72.62
2	33.33	34.29	413.3	28.41	73.11

	V 2924
line	292.402 {115}
units	Cts/S
avg	24.58
stddev	.13
RSD	.5325

1	24.67
2	24.48

l Name	Slope	Y-int	Correlation	Date Stdized
g3280	0.0323	0.0263	1.0000000	07/18/07 11:13:55
l3082	0.0030	0.3685	1.0000000	07/18/07 10:44:32
l3961	0.0219	0.0430	1.0000000	07/18/07 10:44:32
s1937	0.0166	0.1083	1.0000000	07/18/07 11:17:34
u2427	0.0793	-0.0997	1.0000000	07/18/07 10:40:28
_2496	0.1492	0.1691	1.0000000	07/18/07 10:52:54
_a4934	1.8503	2.4411	1.0000000	07/18/07 10:48:54
_e3130	1.0577	0.7578	1.0000000	07/18/07 10:48:54
_i1902	0.0094	0.0219	1.0000000	07/18/07 10:40:28
_a3179	0.0192	-0.0208	1.0000000	07/18/07 10:44:32
_d2288	0.3977	-0.0796	1.0000000	07/18/07 10:52:54
_o2286	0.3216	0.0105	1.0000000	07/18/07 10:48:54
_r3578	0.0171	0.0554	1.0000000	07/18/07 11:17:34
_u3247	0.0394	0.1787	1.0000000	07/18/07 10:48:54
_e2599	0.5117	0.5702	1.0000000	07/18/07 10:48:54
_e2068	0.0077	0.1247	1.0000000	07/18/07 10:40:28
_n2306	0.0258	0.0268	1.0000000	07/18/07 10:40:28
_7664	0.1247	1.6435	1.0000000	07/18/07 10:44:32
_i6103	0.2255	-37.3973	1.0000000	07/18/07 11:17:34
_g3838	0.0101	-0.0346	1.0000000	07/18/07 10:44:32
_n2576	1.8588	0.4665	1.0000000	07/18/07 10:48:54
_o2020	0.1124	0.0083	1.0000000	07/18/07 11:04:24
_a5889	0.8762	-64.1838	1.0000000	07/18/07 10:44:32
_a5895	0.4670	12.6307	1.0000000	07/18/07 10:44:32
_i2316	0.2160	-0.0457	1.0000000	07/18/07 10:44:32
_s2255	0.0371	-0.5591	1.0000000	07/18/07 10:40:28
_b2203	0.0332	0.0441	1.0000000	07/18/07 10:52:54
_d3242	0.0000	-0.0526	1.0000000	07/18/07 10:40:28
_t2036	-0.0007	-0.0096	-1.0000000	07/18/07 10:40:28
_t2144	0.0141	0.0309	1.0000000	07/18/07 10:40:28
_u2402	0.0737	0.3076	1.0000000	07/18/07 10:40:28
_b2068	0.0227	0.0373	1.0000000	07/18/07 11:04:24
_e1960	0.0141	0.0321	1.0000000	07/18/07 11:17:34
_i2881	0.0028	0.0997	1.0000000	07/18/07 10:40:28
_n1899	0.0364	0.0133	1.0000000	07/18/07 11:17:34
_r3464	0.0177	-0.0224	1.0000000	07/18/07 10:48:54
_a2400	-0.0101	0.1213	-1.0000000	07/18/07 10:40:28
_e2142	0.0146	-0.0299	1.0000000	07/18/07 10:40:28
_i3361	0.0641	0.0429	1.0000000	07/18/07 11:04:24
_l1908	0.0105	-0.0238	1.0000000	07/18/07 10:52:54
_V_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

ethod: SPEX Sample Name: ICV-1 Operator:
omment:
un Time: 07/18/07 11:39 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	488.5	2186.	2082.	2018.	<.0000
Stddev	.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
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	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	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	2119.	2054.	2007.	2016.	2096.
Stddev	6.	4.	.	.	.
%RSD	.2678	.1840	.0102	.0161	.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

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

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	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}
Units	ppb	ppb	ppm	ppb	ppb
Avg	2043.	23.81	<.0000	<.0000	2150.
Stddev	3.	1.60	.1785	.4588	.
%RSD	.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

Method: SPEX

Sample Name: ICB-1

Operator:

Comment:

Run Time: 07/18/07 11:40 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	<.0000	15.13	<.0000	.3902	<.0000
Stddev	.6068	18.77	.7171	.4204	.1815
%RSD	61.50	124.0	20.57	107.7	116.7
#1	<.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

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

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	.2928	3.238	<.0000	2.978	.2626
Stddev	.6332	.674	1.483	.002	.0479
%RSD	216.2	20.80	199.6	.0495	18.25

#1	<.0000	3.714	<.0000	2.977	.2965
#2	.7405	2.762	.3058	2.979	.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	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

Method: SPEX Sample Name: CRI-1 Operator:
 Comment:
 Run Time: 07/18/07 11:45 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	19.91	36.11	1.521	20.45	<.0000
Stddev	1.02	23.89	.091	1.29	.3134
%RSD	5.146	66.18	5.973	6.287	22.50
#1	20.63	53.00	1.457	19.54	<.0000
#2	19.18	19.21	1.585	21.36	<.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	1.076	.1140	9.714	<.0000	3.251
Stddev	.281	.0810	.056	.1866	.612
%RSD	26.13	71.06	.5733	14.51	18.83
#1	1.274	.0567	9.753	<.0000	3.684
#2	.8768	.1712	9.674	<.0000	2.818
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	9.938	99.38	19.59	50.28	1.040
Stddev	.045	.14	1.82	1.82	.034
%RSD	.4545	.1380	9.310	3.622	3.262
#1	9.906	99.28	20.88	51.57	1.016
#2	9.970	99.47	18.30	48.99	1.064
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	2.123	.7530	<.0000	1.791	3.026
Stddev	.511	1.048	.0032	.048	7.584
%RSD	24.10	139.2	.0781	2.664	250.6
#1	2.484	1.494	<.0000	1.757	<.0000
#2	1.761	.0119	<.0000	1.824	8.389
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	29.45	.9358	5.007	<.0000	82.95
Stddev	.05	.0311	.587	.2985	.02
%RSD	.1690	3.328	11.72	6.784	.0216
#1	29.42	.9578	5.422	<.0000	82.96
#2	29.49	.9138	4.592	<.0000	82.93
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	5.378	<.0000	1.261	<.0000
Stddev	1.437	.039	738.7	.002	2.230
%RSD	454.2	.7226	423.6	.1275	70.71
#1	<.0000	5.350	<.0000	1.262	<.0000
#2	.6998	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}
Units	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	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	1.547	<.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	< .0000	<.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

ethod: SPEX

Sample Name: ICSA-1

Operator:

omment:

un Time: 07/18/07 11:50 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	<.0000	449500.	367300.	<.0000	<.0000
Stddev	.0582	1100.	1035.	1.338	1.938
%RSD	.2412	.2446	.2817	4.185	.7671
#1	<.0000	448800.	366600.	< .0000	< .0000
#2	<.0000	450300.	368100.	< .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	1.185	.0006	30.06	348800.
Stddev	1.920	.041	.0205	4.52	168.
%RSD	.5337	3.422	3603.	15.03	.0482
#1	< .0000	1.214	.0150	33.26	348700.
#2	< .0000	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	< .0000	<.0000	117200.
#2	<.0000	<.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	< .0000	<.0000	<.0000	425700.
#2	19.86	< .0000	<.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	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	2317.	<.0000	4184.	1887.	<.0000
Stddev	15.	.5104	1151.	9.	1.656
%RSD	.6374	.4893	27.51	.4622	1.132
#1	2307.	<.0000	4998.	1893.	< .0000
#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}
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	<.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

Method: SPEX

Sample Name: ICSAB-1

Operator:

Comment:

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}
Units	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	476.7	449.2	32.07	348400.
#2	<.0000	477.7	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	<.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	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

#1	2417.	1000.	6859.	2076.	<.0000
#2	2423.	1003.	4417.	2138.	<.0000

Sample Name: ICSAB-1 Run Time: 07/18/07 12:02

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	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	<.0000	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}
Units	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

#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}
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

Method: SPEX

Sample Name: CCV-1

Operator:

Comment:

Run Time: 07/18/07 12:07 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	491.9	2093.	2048.	2035.	<.0000
Stddev	2.3	3.	1.	13.	.4957
%RSD	.4750	.1574	.0293	.6183	.8090

#1	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

#1	1916.	2093.	2075.	<.0000	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	<.0000	<.0000	9869.	1936.	2036.
#2	<.0000	<.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	<.0000
#2	11.05	2154.	5926.	403.9	<.0000

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}	288.158 {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

#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}
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

Method: SPEX Sample Name: CCB-1

Operator:

Comment:

Run Time: 07/18/07 12:11 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	<.0000	17.86	<.0000	<.0000	<.0000
Stddev	.4851	8.37	2.330	.1054	.3906
%RSD	226.2	46.85	408.1	51.62	167.3

#1	<.0000	11.94	<.0000	<.0000	<.0000
#2	.1286	23.77	1.077	<.0000	.0427

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	.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
#2	<.0000	.0761	<.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	<.0000	.1123	1.537	.4925	12.52
Stddev	.1339	.1479	2.176	.8435	5.37
%RSD	227.0	131.7	141.6	171.3	42.89

#1	<.0000	.0077	3.076	<.0000	16.32
#2	.0357	.2168	<.0000	1.089	8.723

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	2.404	<.0000	<.0000	2.566	.1364
Stddev	.452	.9127	.2697	2.131	4.669
%RSD	18.82	694.6	4.572	83.06	3422.

#1	2.723	<.0000	<.0000	4.073	<.0000
#2	2.084	.5140	<.0000	1.059	3.438

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	.5599	<.0000	<.0000	.0700
Stddev	.0261	.1048	.1256	.2735	.1071
%RSD	35.92	18.72	1.776	1.555	153.0

#1	<.0000	.4858	<.0000	<.0000	<.0000
#2	<.0000	.6340	<.0000	<.0000	.1457

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	58.02	<.0000	.0659
Stddev	1.036	.3684	574.4	1.189	2.199
%RSD	345.1	30.70	989.9	6.578	3338.

#1	.4324	<.0000	464.2	<.0000	<.0000
#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}	288.158 {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	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

Method: SPEX Sample Name: CCV-2 Operator:
 Comment:
 Run Time: 07/18/07 14:03 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	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	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	1916.	2063.	2055.	.8897	2048.
Stddev	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	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	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	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	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	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	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	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	30.34	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

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

	Ru2402	Sb2068	Se1960	Si2881	Sn1899
em	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
ne	ppb	ppb	ppb	ppb	ppb
its	<.0000	1979.	2026.	4083.	2036.
g	.0000	64.	12.	4.	6.
ddev	.0006	3.212	.5810	.0992	.2850
SD					
	<.0000	1934.	2018.	4080.	2032.
	<.0000	2024.	2035.	4086.	2040.
	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
em	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
ne	ppb	ppb	ppm	ppb	ppb
its	2063.	24.14	<.0000	<.0000	2167.
g	10.	2.07	4.038	.1834	7.
ddev	.4891	8.581	1.336	6.476	.3373
SD					
	2070.	22.68	<.0000	<.0000	2162.
	2056.	25.61	<.0000	<.0000	2172.
	V 2924	W 2397	Zn2138	Zr3391	
em	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
ne	ppb	ppb	ppb	ppb	
its	2021.	<.0000	2062.	.9862	
rg	-	10.88	2.	.0297	
ddev	.0116	1.178	.0920	3.014	
SD					
1	2021.	<.0000	2061.	.9652	
2	2020.	<.0000	2064.	1.007	

Method: SPEX

Sample Name: CCB-2

Operator:

Comment:

Run Time: 07/18/07 14:05 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	1.759	17.87	<.0000	.9484	<.0000
Stddev	.850	16.18	1.972	.2633	.4016
%RSD	48.29	90.55	115.2	27.76	859.6

#1	1.158	29.30	< .0000	1.135	.2373
#2	2.360	6.426	< .0000	.7623	<.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	.4551	.0376	.0224	.1319	.2890
Stddev	.5617	.0170	.0185	.1398	1.124
%RSD	123.4	45.15	82.96	106.0	388.9

#1	.8523	.0256	.0092	.0331	1.084
#2	.0579	.0496	.0355	.2307	< .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	<.0000	.0384	<.0000	1.442	.4005
Stddev	.0527	.0705	2.290	.199	.0784
%RSD	64.02	183.8	83.20	13.80	19.57

#1	<.0000	<.0000	< .0000	1.301	.3451
#2	<.0000	.0883	< .0000	1.583	.4559

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	1.402	.3227	<.0000	<.0000	<.0000
Stddev	1.417	.2704	1.100	1.820	1.945
%RSD	101.0	83.78	26.49	167.0	108.8

#1	2.404	.1315	< .0000	< .0000	< .0000
#2	.4005	.5139	< .0000	.1972	< .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	1.035	<.0000	<.0000	.1557
Stddev	.0303	.202	1.391	.0795	.0141
%RSD	30.57	19.50	12.09	.3846	9.083

#1	<.0000	.8920	< .0000	<.0000	.1457
#2	<.0000	1.177	< .0000	<.0000	.1657

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	.0001
Stddev	1.529	.3421	4519.	4.161	.3716
%RSD	166.9	31.97	210.2	98.99	366000.

1	.1653	<.0000	< .0000	< .0000	<.0000
2	< .0000	<.0000	1046.	< .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

#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	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	.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

Method: SPEX

Sample Name: CCV-3

Operator:

Comment:

Run Time: 07/18/07 15:12 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	484.0	2175.	2148.	2083.	<.0000
Stddev	1.8	.	10.	4.	.1321
%RSD	.3770	.0187	.4765	.1926	.9607
#1	485.3	2175.	2156.	2080.	<.0000
#2	482.7	2175.	2141.	2085.	<.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	1924.	2003.	2093.	1.186	2116.
Stddev	1.	5.	1.	.047	.
%RSD	.0394	.2685	.0544	3.932	.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	<.0000	10110.	2291.	2073.
#2	<.0000	<.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	5.288	3.970
#1	30.55	2204.	2672.	389.6	<.0000
#2	30.42	2195.	2440.	419.9	<.0000

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

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.	<.0000	2096.	1.931
#2	2033.	<.0000	2092.	.9232

Method: SPEX

Sample Name: CCB-3

Operator:

Comment:

Run Time: 07/18/07 15:15 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	.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	<.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 { 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	<.0000	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.	<.0000	.8323
#2	<.0000	<.0000	3253.	<.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	<.0000	.5506
#2	.4476	6.979	.6554	<.0000	.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

Method: SPEX

Sample Name: CCV-4

Operator:

Comment:

Run Time: 07/18/07 16:00 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	493.1	2156.	2069.	2021.	<.0000
Stddev	1.8	6.	6.	12.	1.001
%RSD	.3730	.2665	.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	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	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	< .0000	<.0000	9736.	1991.	2038.
#2	< .0000	<.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

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

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	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.	< .0000	2054.	.6711
#2	2029.	< .0000	2067.	1.763

Method: SPEX Sample Name: CCB-4 Operator:
 Comment:
 Run Time: 07/18/07 16:06 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	.3864	29.79	<.0000	.6506	<.0000
Stddev	.2424	.61	1.883	.6302	.2749
%RSD	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

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	.5543	.0446	<.0000	.5604	1.589
Stddev	.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	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	.3108	<.0000	1.981	<.0000
Stddev	3.683	.5240	.9721	.508	2.141
%RSD	1841.	168.6	22.11	25.63	64.84

#1	<.0000	<.0000	<.0000	1.622	<.0000
#2	2.404	.6813	<.0000	2.340	<.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	4.119	8.852	<.0000	.0671
Stddev	.0134	1.016	.072	.0409	.1757
%RSD	27.65	24.67	.8148	.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	ppb	ppb	ppb	ppb	ppb
Avg	.3662	<.0000	<.0000	<.0000	.6572
Stddev	.6103	.4209	2218.	14.86	.4960
%RSD	166.7	17.07	103.1	98.20	75.47

#1	<.0000	<.0000	<.000	<.0000	.3065
#2	.7978	<.0000	<.000	<.0000	1.008

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	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

Method: SPEX

Sample Name: MBLK, IS

Operator:

Comment:

Run Time: 07/18/07 16:13 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	<.0000	23.33	1.584	.5577	<.0000
Stddev	.0608	13.54	2.510	.7620	.1101
%RSD	4.432	58.05	158.5	136.6	42.25

#1	<.0000	13.76	3.359	1.097	<.0000
#2	<.0000	32.91	<.0000	.0189	<.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	.0455	.1078	.0537	.7910	.4334
Stddev	.1054	.0038	.0817	2.097	.7152
%RSD	231.6	3.525	152.2	265.2	165.0

#1	<.0000	.1051	.1115	2.274	<.0000
#2	.1200	.1105	<.0000	<.0000	.9392

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	.0470	1.215	1.230	.4161
Stddev	.0197	.0963	2.635	1.493	.1057
%RSD	22.71	204.9	216.9	121.4	25.39

#1	<.0000	.1151	3.077	2.286	.4908
#2	<.0000	<.0000	<.0000	.1746	.3414

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	.0837	<.0000	2.788	5.088
Stddev	1.417	.0676	1.778	1.119	3.890
%RSD	58.00	80.86	44.58	40.13	76.44

#1	<.0000	.0358	<.0000	1.997	7.838
#2	<.0000	.1315	<.0000	3.580	2.338

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	1.021	8.355	<.0000	.0929
Stddev	.0007	.004	.758	.9624	.0465
%RSD	1.162	.3863	9.071	18.64	50.04

#1	<.0000	1.018	7.819	<.0000	.1257
#2	<.0000	1.024	8.891	<.0000	.0600

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	1.183
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

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	.4269	3.755	.2403	8.907	.0508
Stddev	.5508	.519	.9580	.014	.2276
%RSD	129.0	13.83	398.6	.1542	447.6

#1	.0375	4.122	.9177	8.917	.2118
#2	.8164	3.388	<.0000	8.897	<.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	2.297	1.953	<.0000	<.0000	<.0000
Stddev	1.591	2.460	.5092	.2140	.1246
%RSD	69.27	125.9	70.73	24.75	212.5

#1	3.421	.2139	<.0000	<.0000	.0295
#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

Method: SPEX

Sample Name: LCS-S,IS

Operator:

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}
Units	ppb	ppb	ppm	ppb	ppb
Avg	338.3	25550.	26600.	581.6	<.0000
Stddev	.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	.4850	293.1	.2591	5.288

#1	495.4	580.6	812.2	456.8	< .0000
#2	497.7	584.5	< .000	458.5	< .0000

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

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	151.8	713.6	2761.	570.9
Stddev	1.580	1.1	3.3	9.	3.7
%RSD	2.816	.7356	.4585	.3088	.6414

#1	<.0000	152.6	711.3	2767.	568.3
#2	<.0000	151.0	715.9	2755.	573.5

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	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

Method: SPEX Sample Name: 070622060-001A,IS Operator:
 Comment:
 Run Time: 07/18/07 16:31 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	<.0000	8664.	8854.	2.008	<.0000
Stddev	1.093	82.	43.	.605	.2760
%RSD	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	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	1.388	<.0000	1407.	17.31
Stddev	1.386	.250	1.051	23.	.47
%RSD	4.728	18.02	50.09	1.643	2.695

#1	< .0000	1.565	< .0000	1391.	17.64
#2	< .0000	1.211	< .0000	1424.	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	W_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

Method: SPEX

Sample Name: 070622060-002A, IS

Operator:

Comment:

Run Time: 07/18/07 16:36 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	<.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	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	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	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	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	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	4.886	<.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	6714.

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	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	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	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

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	Tl1908
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	W 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	12.63	23.97	72.41	7.393
#2	12.41	23.34	72.61	7.813

Method: SPEX

Sample Name: 070622060-003A,IS

Operator:

Comment:

Run Time: 07/18/07 16:40 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	<.0000	8343.	8525.	.9858	<.0000
Stddev	2.125	19.	27.	.3155	.6219
%RSD	82.52	.2311	.3139	32.01	2.169

#1	<.0000	8330.	8506.	.7627	<.0000
#2	<.0000	8357.	8543.	1.209	<.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	30.92	<.0000	3.297	6993.
Stddev	.5969	.18	.0074	1.259	36.
%RSD	1.502	.5912	1.652	38.18	.5187

#1	<.0000	30.79	<.0000	4.187	6967.
#2	<.0000	31.05	<.0000	2.407	7019.

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	.2980	7.761	1.815	4.929	18880.
Stddev	.0636	.133	.528	.348	318.
%RSD	21.36	1.714	29.10	7.063	1.684

#1	.3430	7.667	1.442	4.683	18660.
#2	.2529	7.855	2.189	5.176	19100.

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	3.765	<.0000	393.9	1.105	3523.
Stddev	3.738	.7436	1.2	.701	7.
%RSD	99.27	19.88	.2975	63.47	.1861

#1	1.122	<.0000	393.1	1.601	3519.
#2	6.409	<.0000	394.7	.6091	3528.

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	162.7	.4529	506.8	506.9	9.445
Stddev	.4	.0466	1.0	.8	.020
%RSD	.2401	10.29	.2012	.1629	.2134

1	162.4	.4199	506.1	506.3	9.459
2	162.9	.4858	507.5	507.5	9.430

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	277.3	5.834	347.1	224.5	<.0000
Stddev	1.4	.421	1644.	22.0	.1859
%RSD	.5013	7.217	473.8	9.798	1.448

1	276.3	6.132	<.000	240.0	<.0000
2	278.2	5.536	1510.	208.9	<.0000

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

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	2.368	<.0000	1308.	18.36
Stddev	.5329	.327	.5254	21.	.18
%RSD	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

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	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

#1	18.72	16.63	50.48	3.990
#2	20.98	16.06	50.68	3.654

Method: SPEX Sample Name: 070622060-004A,IS Operator:
 Comment:
 Run Time: 07/18/07 16:44 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	<.0000	15010.	15890.	.2976	<.0000
Stddev	1.821	52.	51.	.0262	.4345
%RSD	28.10	.3492	.3191	8.819	.8253

#1	<.0000	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
Line	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	<.0000	1.973	<.0000	1418.	17.53
#2	<.0000	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: SPEX

Sample Name: 070622060-005A, IS

Operator:

Comment:

Run Time: 07/18/07 16:51 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	<.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	<.0000	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

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

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	8396.	17.67
Stddev	.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

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	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}
Units	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

Method: SPEX Sample Name: 070622060-006A,IS Operator:
 Comment:
 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}
Units	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	<.0000
#2	465.7	.5304	2324.	382.1	<.0000

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

Element	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	2.027	<.0000	6984.	16.53
Stddev	.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

Element	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	46.99	214.5	<.0000	1374.	<.0000
Stddev	1.66	6.1	.9584	7.	1.950
RSD	3.529	2.862	55.88	.5326	43.17

1	45.82	210.2	<.0000	1369.	< .0000
2	48.17	218.9	<.0000	1380.	< .0000

Element	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	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

Method: SPEX

Sample Name: 070622060-007A,IS

Operator:

Comment:

Run Time: 07/18/07 17:02 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}
Units	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}
Units	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	<.0000
#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

Method: SPEX

Sample Name: 070622060-008A, IS

Operator:

Comment:

Run Time: 07/18/07 17:10 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	<.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	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	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}
Units	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	<.0000	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

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	Tl1908
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}
Units	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

Method: SPEX Sample Name: CCV-5 Operator:
 Comment:
 Run Time: 07/18/07 17:14 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	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}
Units	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.	<.0000	2044.
#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}
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	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	9855.	2029.	2048.
Stddev	2.888	1.301	23.	15.	5.
%RSD	10.91	92.28	.2347	.7386	.2338
#1	<.0000	<.0000	9872.	2039.	2044.
#2	<.0000	<.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}
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	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	31.97	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

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	<.0000	<.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.	<.0000	2080.	1.805
#2	2033.	<.0000	2068.	2.141

Method: SPEX Sample Name: CCB-5

Operator:

Comment:

Run Time: 07/18/07 17:23 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	<.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

#1	.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}
Units	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	<.0000	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	Ni2316
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	<.0000	2.146
#2	.4031	<.0000	<.0000	<.0000	<.0000

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

Method: SPEX

Sample Name: 070622060-009A,IS

Operator:

Comment:

Run Time: 07/18/07 17:26 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	<.0000	14610.	15570.	2.547	<.0000
Stddev	1.336	173.	26.	1.315	.6664
%RSD	34.20	1.186	.1678	51.61	1.674

#1	<.0000	14490.	15550.	1.618	<.0000
#2	<.0000	14740.	15590.	3.477	<.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	37.26	.0635	6.263	8711.
Stddev	.7291	.23	.0390	1.539	28.
%RSD	1.315	.6165	61.36	24.56	.3189

#1	<.0000	37.10	.0911	5.175	8691.
#2	<.0000	37.43	.0360	7.351	8730.

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	10.73	5.029	1.622	26610.
Stddev	.0790	.04	2.614	1.045	660.
%RSD	42.07	.3526	51.98	64.39	2.481

#1	<.0000	10.75	6.877	.8837	26140.
#2	<.0000	10.70	3.180	2.361	27070.

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	4.446	<.0000	603.1	.3584	5551.
Stddev	3.002	.4225	2.1	.5898	20.
%RSD	67.52	11.40	.3508	164.5	.3690

#1	2.323	<.0000	601.7	.7755	5537.
#2	6.569	<.0000	604.6	<.0000	5566.

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	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	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	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

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

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	18.48	<.0000	8755.	22.63
Stddev	.9418	8.52	1.515	33.	.32
RSD	2.224	46.13	106.6	.3778	1.428

#1	<.0000	24.51	<.0000	8732.	22.86
#2	<.0000	12.45	<.0000	8779.	22.41

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	36.58	192.3	<.0000	473.8	<.0000
Stddev	2.45	1.0	.4790	4.9	1.991
RSD	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}
Units	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

Method: SPEX Sample Name: 070622060-010A,IS Operator:
 Comment:
 Run Time: 07/18/07 17:30 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	<.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}
Units	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}
Units	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}
Units	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}	588.995 { 57}	589.592 { 57}	231.604 {145}
Units	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

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

Element	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	5.592	<.0000	8310.	23.23
Stddev	.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

Element	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	107.0	144.8	<.0000	496.8	<.0000
Stddev	.8	.6	1.407	.7	1.452
RSD	.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

Element	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	4.399	16.81	67.46	4.725
Stddev	3.032	.39	.25	.326
RSD	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

Method: SPEX Sample Name: 070622060-011A,IS Operator:
 Comment:
 Run Time: 07/18/07 17:36 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	<.0000	11330.	11890.	57.76	<.0000
Stddev	.0000	68.	40.	.21	.5841
%RSD	.0002	.5999	.3367	.3677	2.306

#1	<.0000	11280.	11870.	57.91	<.0000
#2	<.0000	11380.	11920.	57.61	<.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	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.

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	.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}
Units	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}
Units	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

#1	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}
Units	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	3719.	208.9	<.0000

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

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	4.748	5.682	4418.	33.90
Stddev	.3382	1.270	.309	27.	.16
%RSD	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	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	146.8	133.3	<.0000	1075.	<.0000
Stddev	1.5	.7	.6883	8.	1.369
%RSD	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}
Units	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

Method: SPEX

Sample Name: 070622060-012A, IS

Operator:

Comment:

Run Time: 07/18/07 17:40 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	<.0000	7536.	7792.	32.33	<.0000
Stddev	.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

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	161.1	1.184	5.175	4345.
Stddev	.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.

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	.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.

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	4.524	<.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}
Units	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

#1	157.2	5.705	170.0	159.2	51.34
#2	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}
Units	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	<.0000
#2	212.2	67.23	<.0000	155.9	<.0000

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}
Units	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	3343.	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}
Units	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}
Units	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

#1	73.99	8.943	52.21	5.292
#2	71.29	9.779	52.46	3.906

Method: SPEX

Sample Name: 070622060-013A,IS

Operator:

Comment:

Run Time: 07/18/07 17:45 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	<.0000	71430.	75880.	83.15	<.0000
Stddev	1.579	915.	269.	.21	.5612
RSD	16.06	1.280	.3549	.2531	.9942

#1	<.0000	72080.	75690.	83.00	<.0000
#2	<.0000	70790.	76070.	83.30	<.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	1581.	8.379	8.108	36580.
Stddev	.0265	6.	.004	1.165	191.
RSD	.0267	.3761	.0462	14.37	.5225

#1	<.0000	1577.	8.381	8.932	36440.
#2	<.0000	1586.	8.376	7.284	36710.

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	1.010	56.04	63.32	143.9	50660.
Stddev	.009	.07	2.28	.7	716.
RSD	.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.

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	4.884	<.0000	10880.	34.54	5236.
Stddev	1.812	.8450	89.	.26	20.
RSD	37.10	5.698	.8169	.7480	.3810

#1	3.603	<.0000	10820.	34.72	5222.
#2	6.165	<.0000	10940.	34.36	5250.

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	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

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	874.5	48.81	4998.	736.7	<.0000
Stddev	.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	<.0000
#2	875.0	49.78	5115.	744.3	<.0000

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

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	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.	<.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	114.5	42.34	247.3	63.62
Stddev	2.4	1.32	.2	.21
%RSD	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:

Comment:

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}	308.215 {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	.7340	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.
Stddev	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	<.0000	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}
Units	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	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	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	< .0000	970.8	3.138
#2	100.8	132.3	< .0000	991.6	< .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	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: 070622060-014ADP,IS Operator:
 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}
Units	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}
Units	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}
Units	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

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}	288.158 {116}	189.989 {176}
Units	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}
Units	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

Method: SPEX Sample Name: 070622060-014AMS,IS Operator:
 Comment:
 Run Time: 07/18/07 17:58 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}
Units	ppb	ppb	ppm	ppb	ppb
Avg	40.65	20910.	22030.	89.14	<.0000
Stddev	.24	145.	135.	.99	.1904
%RSD	.5983	.6917	.6123	1.111	.5741

#1	40.48	20800.	21940.	89.84	<.0000
#2	40.83	21010.	22130.	88.44	<.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	2293.	55.49	5.999	7979.
Stddev	.2153	18.	.25	1.165	62.
%RSD	.4940	.7903	.4453	19.41	.7786

#1	<.0000	2280.	55.31	6.823	7935.
#2	<.0000	2306.	55.66	5.176	8023.

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	49.90	513.5	231.0	342.4	22260.
Stddev	.21	1.5	.3	1.6	287.
%RSD	.4228	.2868	.1157	.4660	1.290

#1	49.76	512.4	231.2	341.3	22060.
#2	50.05	514.5	230.8	343.5	22460.

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	18.46	<.0000	1142.	21.10	1432.
Stddev	.39	.7942	6.	.03	12.
%RSD	2.129	830.0	.5420	.1295	.8568

#1	18.74	.4659	1137.	21.12	1424.
#2	18.18	<.0000	1146.	21.08	1441.

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	823.3	6.466	442.0	436.5	556.1
Stddev	1.9	.174	2.3	3.6	1.2
%RSD	.2348	2.692	.5189	.8244	.2107

#1	822.0	6.589	440.4	433.9	555.3
#2	824.7	6.342	443.6	439.0	556.9

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	340.2	90.71	2324.	359.4	<.0000
Stddev	2.2	.77	493.	10.7	.6471
%RSD	.6524	.8461	21.23	2.987	1.715

#1	338.7	91.25	1975.	351.8	<.0000
#2	341.8	90.17	2673.	366.9	<.0000

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

#1	<.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	W_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	578.8	19.41

Comment:

Run Time: 07/18/07 18:02 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}
Units	ppb	ppb	ppm	ppb	ppb
Avg	90.45	17860.	18840.	113.5	<.0000
Stddev	1.70	101.	31.	1.1	.0439
%RSD	1.879	.5660	.1652	.9502	.1504

#1	91.65	17780.	18860.	112.7	<.0000
#2	89.25	17930.	18820.	114.2	<.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	4175.	107.4	4.878	9158.
Stddev	.4827	18.	.6	.419	35.
%RSD	1.547	.4278	.6010	8.601	.3831

#1	<.0000	4162.	106.9	4.581	9133.
#2	<.0000	4187.	107.8	5.175	9183.

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	103.6	1063.	440.3	602.7	18560.
Stddev	.4	5.	.6	1.3	476.
%RSD	.4281	.4271	.1412	.2231	2.564

#1	103.3	1060.	439.8	601.8	18230.
#2	103.9	1066.	440.7	603.7	18900.

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	27.15	3.418	894.6	1.529	1540.
Stddev	1.13	.625	.4	.052	2.
%RSD	4.171	18.30	.0476	3.432	.1518

#1	27.95	3.860	894.3	1.566	1538.
#2	26.35	2.975	894.9	1.492	1542.

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	1376.	6.018	351.5	343.4	1125.
Stddev	3.	.031	2.5	2.3	8.
%RSD	.2430	.5161	.7163	.6678	.7492

#1	1374.	5.996	349.7	341.8	1119.
#2	1378.	6.040	353.2	345.0	1131.

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	284.1	113.3	2905.	395.1	<.0000
Stddev	1.3	1.5	164.	12.5	3.964
%RSD	.4476	1.290	5.660	3.159	6.597

#1	283.2	112.2	3021.	403.9	< .0000
#2	285.0	114.3	2789.	386.2	< .0000

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	< .0000	942.8	29.72	5302.	25.62
#2	< .0000	1056.	29.94	5320.	25.21

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	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	W_2397	Zn2138	Zr3391
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}
Units	ppb	ppb	ppb	ppb
Avg	1084.	<.0000	1121.	12.33
Stddev	13.	2.074	5.	.62
%RSD	1.207	.4687	.4225	5.060

#1	1075.	< .0000	1117.	11.89
#2	1093.	< .0000	1124.	12.77

Method: SPEX Sample Name: 070622060-014AL, IS Operator:
 Comment:
 Run Time: 07/18/07 18:06 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	.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	ppb
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	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	.1071	3.282	3.314	15.74	4157.
Stddev	.0307	.280	1.380	1.09	28.
%RSD	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	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	165.6	1.521	357.7
Stddev	5.266	1.251	.7	.227	3.3
%RSD	874.9	197.4	.4418	14.95	.9208

#1	<.0000	<.0000	165.1	1.360	360.0
#2	3.122	.2509	166.1	1.682	355.4

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	79.09	1.150	60.49	48.91	7.879
Stddev	.72	.093	.38	.02	.329
%RSD	.9052	8.099	.6343	.0501	4.179

#1	79.60	1.084	60.76	48.89	8.112
#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}
Units	ppb	ppb	ppb	ppb	ppb
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

#1	58.94	14.06	<.000	6.303	<.0000
#2	57.74	13.37	<.000	13.03	<.0000

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	W 2397	Zn2138	Zr3391
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

Method: SPEX

Sample Name: CCV-6

Operator:

Comment:

Run Time: 07/18/07 18:10 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	488.9	2146.	2074.	2004.	<.0000
Stddev	.3	15.	4.	7.	.5887
RSD	.0701	.6896	.1902	.3716	4.359

#1	489.2	2157.	2077.	1999.	<.0000
#2	488.7	2136.	2072.	2009.	<.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	1906.	2051.	2037.	<.0000	2019.
Stddev	6.	7.	2.	1.165	3.
RSD	.3189	.3523	.1223	104.0	.1563

#1	1902.	2046.	2036.	<.0000	2017.
#2	1910.	2057.	2039.	<.0000	2021.

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	2111.	2042.	1997.	2011.	2082.
Stddev	4.	6.	4.	5.	4.
RSD	.2000	.2894	.1850	.2345	.1807

#1	2108.	2038.	1999.	2008.	2080.
#2	2114.	2046.	1994.	2015.	2085.

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	9716.	2016.	2026.
Stddev	2.888	.4393	10.	4.	.
RSD	13.79	13.77	.1008	.1977	.0236

#1	<.0000	<.0000	9709.	2019.	2026.
#2	<.0000	<.0000	9723.	2014.	2026.

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	2001.	2024.	1824.	1847.	2094.
Stddev	3.	47.	1.	2.	6.
RSD	.1259	2.313	.0362	.1098	.2955

1	2000.	1991.	1825.	1849.	2090.
2	2003.	2058.	1824.	1846.	2098.

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	31.02	2059.	2963.	390.0	<.0000
Stddev	.47	5.	1233.	17.2	35.49
RSD	1.517	.2592	41.62	4.420	1.941

1	31.35	2055.	3835.	377.8	<.0000
2	30.69	2063.	2091.	402.2	<.0000

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	Tl1908
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	1994.	<.0000	2039.	2.183
#2	2003.	<.0000	2047.	.0409

Method: SPEX

Sample Name: CCB-6

Operator:

Comment:

Run Time: 07/18/07 18:14 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	<.0000	9.654	<.0000	<.0000	<.0000
Stddev	.4855	17.49	1.703	.7098	.2530
%RSD	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}
Units	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	< .0000	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	.7148
#2	.1195	<.0000	<.0000	.1073	.7750

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	.2028	<.0000	26.92	7.151
Stddev	2.830	.7773	.0464	.64	1.751
%RSD	234.8	383.2	.8375	2.361	24.49

#1	< .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	1.248
Stddev	.7760	.2236	2877.	8.913	.836
%RSD	316.1	10.83	380.4	25.25	67.03

#1	.3032	<.0000	1278.	< .0000	1.839
#2	<.0000	<.0000	< .000	< .0000	.6563

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}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
avg	<.0000	2.774	<.0000	14.86	.3386
Stddev	.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

Method: SPEX

Sample Name: CRI-2

Operator:

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}
Units	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	8.664	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	<.0000	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	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	18.50

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	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

Method: SPEX Sample Name: ICSA-2 Operator:
 Comment:
 Run Time: 07/18/07 18:22 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	<.0000	376400.	360400.	<.0000	<.0000
Stddev	.0575	952.	2724.	.6245	4.327
%RSD	.0949	.2530	.7560	3.748	.7361

#1	<.0000	377100.	362300.	<.0000	<.0000
#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
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	<.0000	<.0000	397000.
Stddev	3.795	.1018	.1575	6.985	70.
%RSD	557.4	.3150	.8071	1.692	.0177

#1	<.0000	<.0000	<.0000	<.0000	397000.
#2	3.364	<.0000	<.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.	<.0000
#2	629.5	<.0000	3719.	1986.	<.0000

Sample Name: ICSEA-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}
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

Method: SPEX Sample Name: ICSAB-2 Operator:
 Comment:
 Run Time: 07/18/07 18:26 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	929.8	419200.	377600.	<.0000	<.0000
Stddev	5.8	2042.	531.	8.570	.1204
%RSD	.6190	.4873	.1407	22.95	.0194

#1	925.8	417700.	378000.	<.0000	<.0000
#2	933.9	420600.	377200.	<.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	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	<.0000	490.1	458.3	29.70	350200.
#2	<.0000	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}
Units	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.	<.0000
#2	1055.	1030.	4301.	2209.	<.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}
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	Tl1908
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	<.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	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

Method: SPEX

Sample Name: CCV-7

Operator:

Comment:

Run Time: 07/18/07 18:30 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	487.7	2117.	2077.	2001.	<.0000
Stddev	1.8	15.	5.	7.	.0771
%RSD	.3646	.7302	.2195	.3608	.5867

#1	488.9	2107.	2081.	1996.	<.0000
#2	486.4	2128.	2074.	2006.	<.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	1905.	2044.	2029.	<.0000	2017.
Stddev	5.	5.	-	1.678	6.
%RSD	.2476	.2324	.0211	145.4	.2823

#1	1902.	2047.	2029.	.0327	2021.
#2	1908.	2040.	2029.	<.0000	2013.

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	2106.	2044.	1996.	2010.	2079.
Stddev	4.	4.	1.	2.	5.
%RSD	.2123	.1845	.0366	.1199	.2384

#1	2102.	2041.	1996.	2012.	2076.
#2	2109.	2046.	1997.	2008.	2083.

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	9678.	2006.	2019.
Stddev	1.812	.7436	5.	2.	1.
%RSD	7.026	27.41	.0523	.1000	.0710

1	<.0000	<.0000	9675.	2005.	2020.
2	<.0000	<.0000	9682.	2008.	2018.

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	2004.	2029.	1817.	1836.	2091.
Stddev	2.	36.	1.	4.	5.
%RSD	.0829	1.759	.0557	.2004	.2273

1	2003.	2003.	1817.	1833.	2088.
2	2005.	2054.	1818.	1838.	2095.

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	31.30	2142.	2091.	373.2	<.0000
Stddev	.35	2.	3289.	30.3	66.45
%RSD	1.127	.0745	157.3	8.123	3.474

1	31.55	2141.	4417.	351.8	<.0000
2	31.05	2143.	<.0000	394.6	<.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	<.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

Method: SPEX

Sample Name: CCB-7

Operator:

Comment:

Run Time: 07/18/07 18:33 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	<.0000	13.74	<.0000	.5575	<.0000
Stddev	.5460	2.59	.4482	.0259	.0771
%RSD	318.4	18.87	18.61	4.646	13.67
#1	.2146	11.91	<.0000	.5392	<.0000
#2	<.0000	15.58	<.0000	.5758	<.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	.2440	.0368	<.0000	<.0000	3.756
Stddev	.1054	.0583	.0278	1.212	1.532
%RSD	43.18	158.3	36.64	89.67	40.79
#1	.3185	<.0000	<.0000	<.0000	4.840
#2	.1695	.0780	<.0000	<.0000	2.673
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	.0950	<.0000	.8443	.3165
Stddev	.0088	.0448	3.206	.0495	.0315
%RSD	16.14	47.15	123.8	5.869	9.946
1	<.0000	.1266	<.0000	.8793	.2943
2	<.0000	.0633	<.0000	.8093	.3388
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	.1673	<.0000	7.761	2.750
Stddev	2.719	.2535	1.367	.099	2.917
%RSD	154.3	151.5	21.18	1.280	106.1
1	.1602	<.0000	<.0000	7.691	.6874
2	<.0000	.3465	<.0000	7.831	4.813
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	.2360	<.0000	<.0000	<.0000
Stddev	.0035	.0194	.3062	.2058	.1293
%RSD	3.177	8.216	10.40	1.029	4547.
1	<.0000	.2223	<.0000	<.0000	<.0000
2	<.0000	.2497	<.0000	<.0000	.0886
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	.2847
Stddev	.2344	.0657	82.24	23.18	.5887
%RSD	14.38	2.293	141.0	689.2	206.8
1	<.0000	<.0000	<.0000	<.0000	.7009
2	<.0000	<.0000	<.0000	13.03	<.0000

Sample Name: CCB-7 Run Time: 07/18/07 18:33

I 4P-54

(K14)

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	<.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	1.916	<.0000	<.0000	<.0000
Stddev	.159	.2783	.0207	.5936
%RSD	8.323	14.95	2.960	50.50

#1	1.803	<.0000	<.0000	<.0000
#2	2.028	<.0000	<.0000	<.0000

Date: 07/02/2007

Technique: FI-MHS

Calibration Type:

Hg, Zero Intercept: Nonlinear

Wavelength: 253.7 nm

Sample Info Name: HG-J-49A.SIF

Results Data Set Name: HG-J-49A

=====

Element: Hg Seq. No.: 1 AS Loc.: 1 Date: 07/02/2007
 Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0002	0.0011	0.0002	02:55:53	No
2			0.0001	0.0002	0.0001	02:56:22	No
Mean:			0.0001				
SD :			0.0001				
%RSD:			44.2987				

Auto-zero performed.

=====

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 07/02/2007
 Sample ID: 0.5 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0079	0.0390	0.0081	02:57:35	No
2			0.0085	0.0421	0.0086	02:58:04	No
Mean:			0.0082				
SD :			0.0004				
%RSD:			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 µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0165	0.0807	0.0166	02:59:17	No
2			0.0173	0.0840	0.0175	02:59:46	No
Mean:			0.0169				
SD :			0.0006				
%RSD:			3.5208				

[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

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0324	0.1586	0.0326	03:00:59	No
2			0.0337	0.1610	0.0338	03:01:28	No
Mean:			0.0331				
SD :			0.0009				
%RSD:			2.7023				

S-shaped calibration curve detected. Two-coefficient equation used.
 [Hg] Standard number 3 applied. [2.000]
 Correlation Coefficient: 0.99979 Slope: 0.01659

Element: Hg Seq. No.: 5 AS Loc.: 5 Date: 07/02/2007
 Sample ID: 5.00 ppb

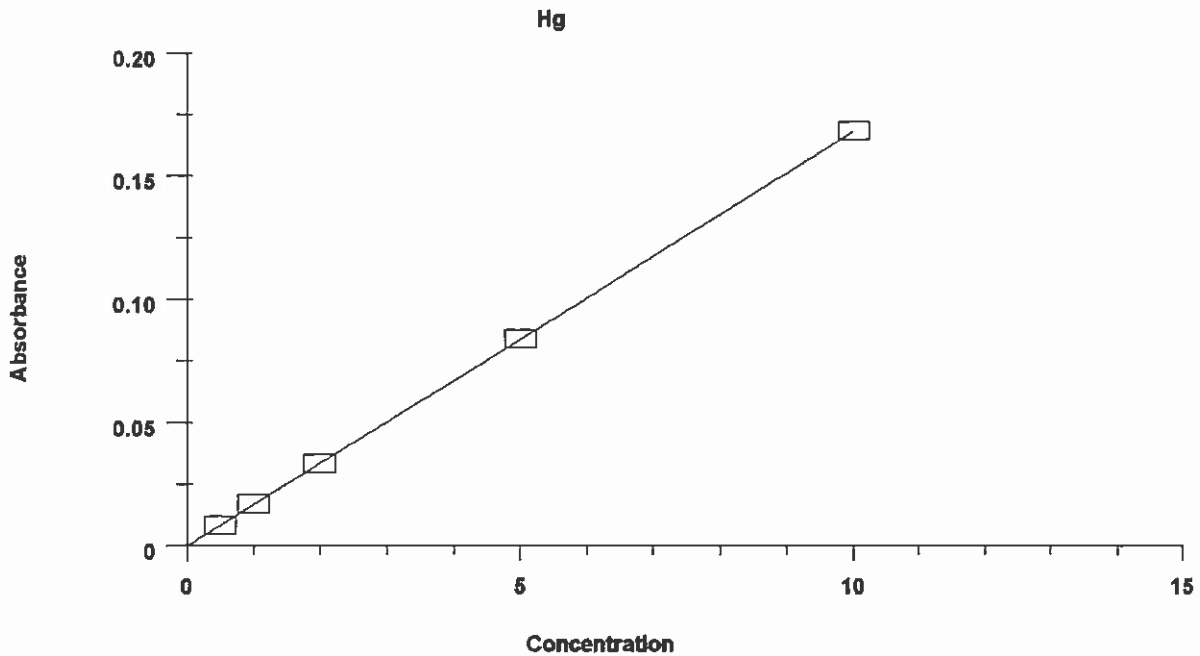
Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0818	0.3946	0.0819	03:02:43	No
2			0.0858	0.4083	0.0860	03:03:12	No
Mean:			0.0838				
SD :			0.0029				
%RSD:			3.4243				
[Hg] Standard number 4 applied. [5.000]							
Correlation Coefficient: 0.99999				Slope: 0.01657			

Element: Hg Seq. No.: 6 AS Loc.: 6 Date: 07/02/2007
 Sample ID: 10.0 ppb

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.1649	0.7935	0.1650	03:04:27	No
2			0.1718	0.8258	0.1719	03:04:56	No
Mean:			0.1683				
SD :			0.0049				
%RSD:			2.8822				
[Hg] Standard number 5 applied. [10.00]							
Correlation Coefficient: 0.99999				Slope: 0.01659			

Calibration data for Hg

Standard ID	Mean Signal (Pk Height)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard 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		----	



Element: Hg Seq. No.: 7 AS Loc.: 4 Date: 07/02/2007
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.920	1.920	0.0319	0.1494	0.0321	03:06:17	No
2	2.026	2.026	0.0337	0.1593	0.0339	03:06:46	No
Mean:	1.973	1.973	0.0328				
SD :	0.07530	0.07530	0.0013				
%RSD:	3.8	3.8	3.8280				

QC value within specified limits.

Element: Hg Seq. No.: 8 AS Loc.: 1 Date: 07/02/2007
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0323	0.0323	0.0005	0.0043	0.0007	03:07:57	No
2	0.0026	0.0026	0.0000	-0.0010	0.0002	03:08:26	No
Mean:	0.0175	0.0175	0.0003				
SD :	0.02100	0.02100	0.0003				
%RSD:	120.1	120.1	120.0691				

QC value within specified limits.

Element: Hg Seq. No.: 9 AS Loc.: 9 Date: 07/02/2007
Sample ID: 0.2 PPB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.1922	0.1922	0.0032	0.0164	0.0033	03:09:37	No
2	0.1997	0.1997	0.0033	0.0173	0.0034	03:10:07	No

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 µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
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	0.09502	0.0016				
%RSD:	4.8	4.8	4.8074				

Element: Hg Seq. No.: 11 AS Loc.: 24 Date: 07/02/2007
 Sample ID: MB-S

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak 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	0.00418	0.0001				
%RSD:	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 µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak 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	0.05163	0.0009				
%RSD:	1.5	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 µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0341	0.0341	0.0006	0.0040	0.0007	03:16:27	No
2	0.0296	0.0296	0.0005	0.0023	0.0006	03:16:56	No
Mean:	0.0318	0.0318	0.0005				
SD :	0.00321	0.00321	0.0001				
%RSD:	10.1	10.1	10.0995				

Element: Hg Seq. No.: 14 AS Loc.: 36 Date: 07/02/2007
 Sample ID: 070622060-002A 0.2/100

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
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	0.02126	0.0004				
%RSD:	168.0	168.0	167.9863				

=====
Element: Hg Seq. No.: 15 AS Loc.: 37 Date: 07/02/2007
Sample ID: 070622060-003A 0.2/100
=====

Repl #	SampleConc µg/L	StdndConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0058	0.0058	0.0001	0.0009	0.0002	03:19:49	No
2	-0.0010	-0.0010	0.0000	-0.0026	0.0001	03:20:19	No
Mean:	0.0024	0.0024	0.0000				
SD :	0.00478	0.00478	0.0001				
%RSD:	198.0	198.0	198.0370				

=====
Element: Hg Seq. No.: 16 AS Loc.: 38 Date: 07/02/2007
Sample ID: 070622060-004A 0.2/100
=====

Repl #	SampleConc µg/L	StdndConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0002	-0.0002	0.0000	0.0000	0.0001	03:21:31	No
2	0.0162	0.0162	0.0003	0.0028	0.0004	03:22:00	No
Mean:	0.0080	0.0080	0.0001				
SD :	0.01158	0.01158	0.0002				
%RSD:	145.1	145.1	145.1332				

=====
Element: Hg Seq. No.: 17 AS Loc.: 39 Date: 07/02/2007
Sample ID: 070622060-005A 0.2/100
=====

Repl #	SampleConc µg/L	StdndConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0241	0.0241	0.0004	0.0015	0.0005	03:23:13	No
2	0.0068	0.0068	0.0001	-0.0021	0.0002	03:23:42	No
Mean:	0.0154	0.0154	0.0003				
SD :	0.01225	0.01225	0.0002				
%RSD:	79.5	79.5	79.4842				

=====
Element: Hg Seq. No.: 18 AS Loc.: 40 Date: 07/02/2007
Sample ID: 070622060-006A 0.2/100
=====

Repl #	SampleConc µg/L	StdndConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0070	0.0070	0.0001	0.0006	0.0002	03:24:56	No
2	0.0072	0.0072	0.0001	0.0012	0.0003	03:25:26	No
Mean:	0.0071	0.0071	0.0001				
SD :	0.00016	0.00016	0.0000				
%RSD:	2.3	2.3	2.3167				

=====
Element: Hg Seq. No.: 19 AS Loc.: 4 Date: 07/02/2007
Sample ID: QC Sample 1
=====

Repl #	SampleConc µg/L	StdndConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.908	1.908	0.0317	0.1524	0.0319	03:26:40	No
2	2.001	2.001	0.0333	0.1585	0.0334	03:27:09	No
Mean:	1.955	1.955	0.0325				
SD :	0.06618	0.06618	0.0011				
%RSD:	3.4	3.4	3.3959				

QC value within specified limits.

=====
Element: Hg Seq. No.: 20 AS Loc.: 1 Date: 07/02/2007
Sample ID: QC Sample 2
=====

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0113	0.0113	0.0002	0.0012	0.0003	03:28:22	No
2	0.0173	0.0173	0.0003	0.0029	0.0004	03:28:51	No
Mean:	0.0143	0.0143	0.0002				
SD :	0.00422	0.00422	0.0001				
%RSD:	29.6	29.6	29.5792				

QC value within specified limits.

=====

Element: Hg Seq. No.: 21 AS Loc.: 41 Date: 07/02/2007
Sample ID: 070622060-007A 0.2/100

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0155	-0.0155	-0.0003	-0.0047	-0.0001	03:30:04	No
2	-0.0021	-0.0021	0.0000	-0.0015	0.0001	03:30:33	No
Mean:	-0.0088	-0.0088	-0.0001				
SD :	0.00948	0.00948	0.0002				
%RSD:	107.8	107.8	107.7910				

=====

Element: Hg Seq. No.: 22 AS Loc.: 42 Date: 07/02/2007
Sample ID: 070622060-008A 0.2/100

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0064	0.0064	0.0001	-0.0005	0.0002	03:31:48	No
2	0.0328	0.0328	0.0005	0.0049	0.0007	03:32:18	No
Mean:	0.0196	0.0196	0.0003				
SD :	0.01866	0.01866	0.0003				
%RSD:	95.3	95.3	95.3130				

=====

Element: Hg Seq. No.: 23 AS Loc.: 43 Date: 07/02/2007
Sample ID: 070622060-009A 0.2/100

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0112	0.0112	0.0002	0.0021	0.0003	03:33:32	No
2	0.0164	0.0164	0.0003	0.0027	0.0004	03:34:01	No
Mean:	0.0138	0.0138	0.0002				
SD :	0.00368	0.00368	0.0001				
%RSD:	26.6	26.6	26.5772				

=====

Element: Hg Seq. No.: 24 AS Loc.: 44 Date: 07/02/2007
Sample ID: 070622060-010A 0.2/100

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0030	-0.0030	0.0000	-0.0003	0.0001	03:35:16	No
2	0.0201	0.0201	0.0003	0.0030	0.0005	03:35:45	No
Mean:	0.0086	0.0086	0.0001				
SD :	0.01634	0.01634	0.0003				
%RSD:	190.0	190.0	190.0470				

=====

Element: Hg Seq. No.: 25 AS Loc.: 45 Date: 07/02/2007
Sample ID: 070622060-010A DP 0.2/100

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
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1	0.0009	0.0009	0.0000	-0.0007	0.0001	03:37:01	No
2	0.0171	0.0171	0.0003	0.0033	0.0004	03:37:30	No
Mean:	0.0090	0.0090	0.0001				
SD :	0.01149	0.01149	0.0002				
%RSD:	127.8	127.8	127.8248				

Element: Hg Seq. No.: 26 AS Loc.: 46 Date: 07/02/2007
Sample ID: 070622060-010A MS 0.2/100

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak 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	0.02620	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 µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
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				
SD :	0.01446	0.01446	0.0002				
%RSD:	2.8	2.8	2.8221				

Element: Hg Seq. No.: 28 AS Loc.: 48 Date: 07/02/2007
Sample ID: 070622060-012A 0.2/100

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.3828	0.3828	0.0064	0.0321	0.0065	03:42:15	No
2	0.3923	0.3923	0.0065	0.0310	0.0066	03:42:44	No
Mean:	0.3876	0.3876	0.0064				
SD :	0.00672	0.00672	0.0001				
%RSD:	1.7	1.7	1.7338				

Element: Hg Seq. No.: 29 AS Loc.: 49 Date: 07/02/2007
Sample ID: 070622060-013A 0.2/100

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	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				
SD :	0.01161	0.01161	0.0002				
%RSD:	0.8	0.8	0.8299				

Element: Hg Seq. No.: 30 AS Loc.: 50 Date: 07/02/2007
Sample ID: 070622060-014A 0.2/100

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.4858	0.4858	0.0081	0.0389	0.0082	03:45:33	No
2	0.4993	0.4993	0.0083	0.0399	0.0084	03:46:02	No
Mean:	0.4926	0.4926	0.0082				

SD : 0.00957 0.00957 0.0002
 %RSD: 1.9 1.9 1.9437

Element: Hg Seq. No.: 31 AS Loc.: 4 Date: 07/02/2007
 Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.841	1.841	0.0306	0.1481	0.0308	03:47:14	No
2	1.954	1.954	0.0325	0.1556	0.0326	03:47:44	No
Mean:	1.897	1.897	0.0316				
SD :	0.07993	0.07993	0.0013				
%RSD:	4.2	4.2	4.2256				

QC value within specified limits.

Element: Hg Seq. No.: 32 AS Loc.: 1 Date: 07/02/2007
 Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
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:	0.0113	0.0113	0.0002				
SD :	0.01187	0.01187	0.0002				
%RSD:	105.0	105.0	105.0193				

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 µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak 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	0.00553	0.0001				
%RSD:	0.8	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 µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak 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	0.04438	0.0007				
%RSD:	1.8	1.8	1.8096				

Element: Hg Seq. No.: 35 AS Loc.: 53 Date: 07/02/2007
 Sample ID: MB-S

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
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				
SD :	0.01009	0.01009	0.0002				

%RSD: 58.3 58.3 58.3270

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

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	3.270	3.270	0.0545	0.2615	0.0547	03:55:41	No
2	3.289	3.289	0.0548	0.2638	0.0550	03:56:10	No
Mean:	3.279	3.279	0.0547				
SD :	0.01356	0.01356	0.0002				
%RSD:	0.4	0.4	0.4156				

Element: Hg Seq. No.: 37 AS Loc.: 55 Date: 07/02/2007
 Sample ID: 070702007-001A 0.2/100

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0980	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	0.00707	0.0001				
%RSD:	6.9	6.9	6.8633				

Element: Hg Seq. No.: 38 AS Loc.: 56 Date: 07/02/2007
 Sample ID: 070702007-001A DP 0.2/100

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
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	0.00256	0.0000				
%RSD:	2.0	2.0	1.9563				

Element: Hg Seq. No.: 39 AS Loc.: 57 Date: 07/02/2007
 Sample ID: 070702007-001A MS 0.2/100

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
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	2.094	0.0349				
SD :	0.03942	0.03942	0.0007				
%RSD:	1.9	1.9	1.8881				

Element: Hg Seq. No.: 40 AS Loc.: 58 Date: 07/02/2007
 Sample ID: MB-TCLP

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
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:	0.0090	0.0090	0.0001				
SD :	0.01306	0.01306	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 µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
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	0.03348	0.0006				
%RSD:	2.1	2.1	2.1419				

Element: Hg Seq. No.: 42 AS Loc.: 60 Date: 07/02/2007
 Sample ID: 070622062-003A TCLP 1/5

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0110	0.0110	0.0002	0.0008	0.0003	04:05:55	No
2	0.0141	0.0141	0.0002	0.0017	0.0004	04:06:25	No
Mean:	0.0125	0.0125	0.0002				
SD :	0.00222	0.00222	0.0000				
%RSD:	17.7	17.7	17.7358				

Element: Hg Seq. No.: 43 AS Loc.: 4 Date: 07/02/2007
 Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak 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	0.08020	0.0013				
%RSD:	4.3	4.3	4.3377				

QC value within specified limits.

Element: Hg Seq. No.: 44 AS Loc.: 1 Date: 07/02/2007
 Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak 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	0.00531	0.0001				
%RSD:	71.6	71.6	71.6331				

QC value within specified limits.

Element: Hg Seq. No.: 45 AS Loc.: 61 Date: 07/02/2007
 Sample ID: 070625012-001A TCLP 1/5

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
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				
%RSD:	381.7	381.7	381.6470				

Element: Hg Seq. No.: 46 AS Loc.: 62 Date: 07/02/2007

Adirondack Environmental Services, Inc

PREP BATCH REPORT

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

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

Prep Factor Unfls:

Prep Batch 14882 Prep Code: 3050 I Technician: Keith Hammecker

mL / g

Sample ID	Matrix	pH	Res Cl	SampAmt	Sol Added	Fin Vol	factor	PrepStart	PrepEnd
07062006-008A	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
07062006-001A	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
07062009-004A	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
07062009-005A	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
07062009-008A	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
07062009-006AMS	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
07062009-008AMSD	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
07062009-007A	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
07062006-001A	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
07062006-002A	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
07062006-003A	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
07062006-004A	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
07062006-005A	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
07062006-008A	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
07062006-007A	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
07062006-008A	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
07062006-009A	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
07062006-010A	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
07062006-010AMS	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
07062006-010AMSD	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007

Number	Reagent Name	Spk ID	Spike Name	SampType	AmtAdd
1267	Nitric Acid	MT-LCSS	ERAS044540		0
		MT-SPIKE-icp-2	HP519215		0

HotBlock/Bath Temp _____ °C
BathStartTime: _____ StopTime: _____

Adirondack Environmental Services, Inc

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:

Prep Batch 14882 Prep Code: 3050 I Technician: Keith Hammecker

mL / g

Sample ID	Matrix	pH	Res Cl	SampAmt	Sol Added	Fln Vol	factor	PrepStart	PrepEnd
070822080-011A	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
070822080-012A	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
070822080-013A	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
070822080-014A	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
070822080-014AMS	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
070822080-014AMSD	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
070829013-001A	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
070829013-001ADP	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
070829013-001AMS	Soil		No	1	0	200	200.000	6/29/2007	6/29/2007
LCS-14882			No	1	0	200	200.000	6/29/2007	6/29/2007
MB-14882			No	1	0	200	200.000	6/29/2007	6/29/2007

Number	Reagent Name
1267	Nitric Acid

Spk ID	Spike Name	SampType	AmtAdd
MT-LC55	ERAS044540		0
MT-SPIKE-icp-2	HP519215		0

HotBlock/Bath Temp _____ °C
BathStartTime: _____ StopTime: _____

Adirondack Environmental Services, Inc

PREP BATCH REPORT

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

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

Prep Factor Units:

Prep Batch 14883 Prep Code: HG_PREP_S Technician: Keith Hammecker

mL / g

Sample ID	Matrix	pH	Res Cl	SampAmt	Sol Added	Fin Vol	factor	PrepStart	PrepEnd
070620008-008A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070620008-001A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070622008-004A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070822008-005A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070622008-008A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070822008-008AMS	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070622008-008AMSD	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070822080-001A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070622080-002A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070822080-003A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070822080-004A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070622080-005A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070822080-008A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070822080-007A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070822080-008A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070822080-009A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070822080-010A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070822080-010AMS	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070822080-010AMSD	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070822080-011A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007

Spk ID	Spike Name	SampType	AmtAdd
MT-LCSS	ERAS044540		0
MT-SPIKE-HG	SP060509A		0

Number	Reagent Name
1217	H2SO4-metals
1232	KMnO4
1256	Potassium Persulfate-5%-metals
1267	Nitric Acid

HotBlock/Bath Temp _____ °C
 BathStartTime: _____ Stop Time _____

Adirondack Environmental Services, Inc

PREP BATCH REPORT

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

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

Prep Factor Units:

Prep Batch 14883 Prep Code: HG PREP S Technician: Keith Hammecker

mL / g

Sample ID	Matrix	pH	Res Cl	SampAmt	Sol Added	Fin Vol	factor	PrepStart	PrepEnd
070622060-012A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070622060-013A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070622060-014A	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070622060-014AMS	Soil		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	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070629013-001ADP	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
070629013-001AMS	Soil		No	0.2	0	100	500.000	6/29/2007	6/29/2007
LCS-14883			No	0.2	0	100	500.000	6/29/2007	6/29/2007
MB-14883			No	1	0	100	100.000	6/29/2007	6/29/2007

Number	Reagent Name
1217	H2SO4-metals
1232	KMnO4
1256	Potassium Persulfate-5%-metals
1267	Nitric Acid

Spk ID	Spike Name	SampType	AmtAdd
MT-LCSS	ERAS044540		0
MT-SPIKE-HG	SP060509A		0

HotBlock/Bath Temp _____ °C
BathStartTime: _____ Stop Time _____

pMoist

Earth Science CLIP

D-44

Sample	Tim	Tone	Sample + Tone	Final wt	% moisture	Date/mt
070622060-1A	E-A	1-2842	8-6008	6.4617	22.4	7/18/07 V2
-2A	E-B	1-2896	8-3295	6.7890	21.9	
-3A	E-C	1-2774	8-7040	7.0985	21.6	
-4A	E-D	1-2908	9-4573	7.5487	23.4	
-5A	E-E	1-2828	8-3616	8-1331	3.23	
-6A	E-F	1-2841	10-7542	8.5616	23.2	
-7A	E-G	1-2791	8-4879	6.8189	23.3	
-8A	E-H	1-2816	9-2514	7.4361	22.8	
-9A	E-I	1-2870	10-309	8.0681	24.4	
-10A	E-J	1-2872	9-4551	7.5469	23.4	
-10dup	E-K	1-2884	9-8691	8-0242	21.5	
-11A	E-L	1-2815	8-3252	6.6400	23.2	
-12A	E-M	1-2780	8.5655	7.1001	20.1	
-13A	E-N	1-2861	8-4111	6.3183	29.4	
-14A	E-O	1-2875	8-2865	6.8781	20.1	
-14dup	E-P	1-2844	8-2735	6.8388	20.5	✓



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Earth Science Engineering
3271 Main Street
Willsboro, New York 12996

Attention: Douglas Ferris



Experience is the solution

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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 Conventional in accordance with methodology as detailed by the contract. The project was completed on September 4, 2007.

A handwritten signature in black ink, appearing to read "Van der", is written over a horizontal line.

Laboratory Manager

Date: 7/4/07



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SAMPLE DATA

SUMMARY PACKAGE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE IDENTIFICATION AND
ANALYTICAL REQUIREMENT SUMMARY

Customer Sample Code	Laboratory Sample Code	*VOA GC/MS Method	*BNA GC/MS Method	*PCB GC Method	*Pest GC Method	*Metals	*Other CN
SW-1-SU-7	070622041-001					X	X
SW-2-SU-7	070622041-002					X	X
SW-3-SU-7	070622041-003					X	X
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

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Metals Requested	Date Rec'd at Lab	Date Prepared	Date 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
		pH			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
		pH			6/22/07
		Turbidity			6/22/07
070622041-006	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

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

SAMPLE PREPARATION AND ANALYSIS SUMMARY
INORGANIC ANALYSES

Laboratory Sample ID	Matrix	Metals Requested	Date Rec'd at Lab	Date Prepared	Date 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

<u>Sample ID</u>	<u>Laboratory Sample ID</u>	<u>Date Received</u>	<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.

USEPA - CLP

-1-

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.: _____ SDG No.: SW-1-SU-7

Matrix (soil/water): WATER Lab Sample ID: 070622041-001A

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	C	Q	M
7429-90-5	Aluminum	79.3	B		P
7440-36-0	Antimony	54.2	B		P
7440-38-2	Arsenic	7.3	B		P
7440-39-3	Barium	6.9	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	0.50	U		P
7440-70-2	Calcium	17600		E	P
7440-47-3	Chromium	2.7	U		P
7440-48-4	Cobalt	0.90	U		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	U		P
7439-95-4	Magnesium	4280	B	E	P
7439-96-5	Manganese	18.7		E	P
7440-02-0	Nickel	0.90	U		P
7440-09-7	Potassium	789	B		P
7782-49-2	Selenium	8.4			P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium	6870		E	P
7440-28-0	Thallium	6.9	B		P
7440-62-2	Vanadium	4.2	U		P
7440-66-6	Zinc	3.7	B		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

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-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SW-2-SU-7

Lab Name: Adirondack Environmental Contract: Black Ash Pond
 Lab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7
 Matrix (soil/water): WATER Lab Sample ID: 070622041-002A
 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	C	Q	M
7429-90-5	Aluminum	71.1	B		P
7440-36-0	Antimony	16.2	U		P
7440-38-2	Arsenic	2.4	U		P
7440-39-3	Barium	6.5	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	0.50	U		P
7440-70-2	Calcium	17400		E	P
7440-47-3	Chromium	2.7	U		P
7440-48-4	Cobalt	0.90	U		P
7440-50-8	Copper	6.5	B		P
7439-89-6	Iron	199			P
7439-97-6	Mercury	0.06	U	N	CV
7439-92-1	Lead	1.6	U		P
7439-95-4	Magnesium	4270	B	E	P
7439-96-5	Manganese	15.7		E	P
7440-02-0	Nickel	0.90	U		P
7440-09-7	Potassium	698	B		P
7782-49-2	Selenium	3.2	B		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium	7300		E	P
7440-28-0	Thallium	5.8	B		P
7440-62-2	Vanadium	4.2	U		P
7440-66-6	Zinc	1.6	B		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

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-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SW-3-SU-7

Lab Name: Adirondack Environmental Contract: Black Ash Pond

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

Matrix (soil/water): WATER Lab Sample ID: 070622041-003A

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	C	Q	M
7429-90-5	Aluminum	65.1	B		P
7440-36-0	Antimony	26.4	B		P
7440-38-2	Arsenic	7.4	B		P
7440-39-3	Barium	7.1	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	0.50	U		P
7440-70-2	Calcium	17900		E	P
7440-47-3	Chromium	2.7	U		P
7440-48-4	Cobalt	0.90	U		P
7440-50-8	Copper	5.6	B		P
7439-89-6	Iron	207			P
7439-97-6	Mercury	0.18	B	N	CV
7439-92-1	Lead	1.6	U		P
7439-95-4	Magnesium	4500	B	E	P
7439-96-5	Manganese	18.6		E	P
7440-02-0	Nickel	0.90	U		P
7440-09-7	Potassium	685	B		P
7782-49-2	Selenium	4.9	B		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium	6940		E	P
7440-28-0	Thallium	4.5	B		P
7440-62-2	Vanadium	4.2	U		P
7440-66-6	Zinc	1.5	B		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

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-1-

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 No.: SW-1-SU-7
 Matrix (soil/water): WATER Lab Sample ID: 070622041-004A
 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	C	Q	M
7429-90-5	Aluminum	106	B		P
7440-36-0	Antimony	16.2	U		P
7440-38-2	Arsenic	3.7	B		P
7440-39-3	Barium	6.9	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	0.50	U		P
7440-70-2	Calcium	17500		E	P
7440-47-3	Chromium	2.7	U		P
7440-48-4	Cobalt	0.90	U		P
7440-50-8	Copper	10.8	B		P
7439-89-6	Iron	237			P
7439-97-6	Mercury	0.10	B	N	CV
7439-92-1	Lead	1.6	U		P
7439-95-4	Magnesium	4310	B	E	P
7439-96-5	Manganese	18.0		E	P
7440-02-0	Nickel	0.90	U		P
7440-09-7	Potassium	643	B		P
7782-49-2	Selenium	2.4	U		P
7440-22-4	Silver	1.9	B		P
7440-23-5	Sodium	7570		E	P
7440-28-0	Thallium	3.6	B		P
7440-62-2	Vanadium	4.2	U		P
7440-66-6	Zinc	4.1	B		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

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-1-

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 No.: SW-1-SU-7
 Matrix (soil/water): WATER Lab Sample ID: 070622041-005A
 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	C	Q	M
7429-90-5	Aluminum	73.9	B		P
7440-36-0	Antimony	16.2	U		P
7440-38-2	Arsenic	3.0	B		P
7440-39-3	Barium	7.0	B		P
7440-41-7	Beryllium	0.36	B		P
7440-43-9	Cadmium	0.50	U		P
7440-70-2	Calcium	17700		E	P
7440-47-3	Chromium	2.7	U		P
7440-48-4	Cobalt	0.90	U		P
7440-50-8	Copper	8.6	B		P
7439-89-6	Iron	221			P
7439-97-6	Mercury	0.18	B	N	CV
7439-92-1	Lead	1.6	U		P
7439-95-4	Magnesium	4460	B	E	P
7439-96-5	Manganese	24.7		E	P
7440-02-0	Nickel	0.90	U		P
7440-09-7	Potassium	630	B		P
7782-49-2	Selenium	2.4	U		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium	8060		E	P
7440-28-0	Thallium	3.9	B		P
7440-62-2	Vanadium	4.2	U		P
7440-66-6	Zinc	1.2	B		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

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-1-

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.: SW-1-SU-7
 Matrix (soil/water): WATER Lab Sample ID: 070622041-006A
 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	C	Q	M
7429-90-5	Aluminum	108	B		P
7440-36-0	Antimony	16.2	U		P
7440-38-2	Arsenic	2.4	U		P
7440-39-3	Barium	7.5	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	0.50	U		P
7440-70-2	Calcium	16900		E	P
7440-47-3	Chromium	2.7	U		P
7440-48-4	Cobalt	0.90	U		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	U		P
7439-95-4	Magnesium	4330	B	E	P
7439-96-5	Manganese	26.3		E	P
7440-02-0	Nickel	0.90	U		P
7440-09-7	Potassium	575	B		P
7782-49-2	Selenium	2.4	U		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium	9750		E	P
7440-28-0	Thallium	2.0	B		P
7440-62-2	Vanadium	4.2	U		P
7440-66-6	Zinc	3.1	B		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

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-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SW-11-SU-7

Lab Name: Adirondack Environmental Contract: Black Ash Pond

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

Matrix (soil/water): WATER Lab Sample ID: 070622041-007A

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	C	Q	M
7429-90-5	Aluminum	127	B		P
7440-36-0	Antimony	16.2	U		P
7440-38-2	Arsenic	2.4	U		P
7440-39-3	Barium	8.5	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	0.50	U		P
7440-70-2	Calcium	17200		E	P
7440-47-3	Chromium	2.7	U		P
7440-48-4	Cobalt	0.90	U		P
7440-50-8	Copper	11.9	B		P
7439-89-6	Iron	256			P
7439-97-6	Mercury	0.17	B	N	CV
7439-92-1	Lead	1.6	U		P
7439-95-4	Magnesium	4400	B	E	P
7439-96-5	Manganese	28.2		E	P
7440-02-0	Nickel	0.90	U		P
7440-09-7	Potassium	661	B		P
7782-49-2	Selenium	2.4	U		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium	9740		E	P
7440-28-0	Thallium	1.6	B		P
7440-62-2	Vanadium	4.2	U		P
7440-66-6	Zinc	3.3	B		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

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1

CONVENTIONALS ANALYSIS DATA SHEET

SW-1-SU-7

LAB NAME: Adirondack Environmental

CONTRACT:

LAB CODE: AES

Case No.: ESE 0701

SAS No.:

SDG No.: SW-1-SU-7

Matrix (soil/water): Water

Lab Sample ID: 070622041-001

Level (Low/Med): Low

Date Received: 6/22/07

% Solids: 0.0

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

Analyte	Concentration	C	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	6.8			EPA 150.1
Turbidity	2.4			EPA 180.1
Color				EPA 110.2
Hexavalent Chromium				SW 7196

Comments

FORM I - CONV

: 00013

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

SW-2-SU-7

LAB NAME: Adirondack Environmental

CONTRACT:

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 Received: 6/22/07

% Solids: 0.0

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

Analyte	Concentration	C	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	7.2			EPA 150.1
Turbidity	1.5			EPA 180.1
Color				EPA 110.2
Hexavalent Chromium				SW 7196

Comments

FORM I - CONV

: 00014

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

SW-3-SU-7

LAB NAME: Adirondack Environmental

CONTRACT:

LAB CODE: AES

Case No.: ESE 0701

SAS No.:

SDG No.: SW-1-SU-7

Matrix (soil/water): Water

Lab Sample ID: 070622041-003

Level (Low/Med): Low

Date Received: 6/22/07

% Solids: 0.0

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

Analyte	Concentration	C	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	1.7			EPA 180.1
Color				EPA 110.2
Hexavalent Chromium				SW 7196

Comments

FORM I - CONV

00015

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

SW-6-SU-7

LAB NAME: Adirondack Environmental

CONTRACT:

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 Received: 6/22/07

% Solids: 0.0

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

Analyte	Concentration	C	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	7.6			EPA 150.1
Turbidity	5.8			EPA 180.1
Color				EPA 110.2
Hexavalent Chromium				SW 7196

Comments

FORM I - CONV

: 00016

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

SW-9-SU-7

LAB NAME: Adirondack Environmental

CONTRACT:

LAB CODE: AES

Case No.: ESE 0701

SAS No.:

SDG No.: SW-1-SU-7

Matrix (soil/water): Water

Lab Sample ID: 070622041-005

Level (Low/Med): Low

Date Received: 6/22/07

% Solids: 0.0

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

Analyte	Concentration	C	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

FORM I - CONV

: 00017

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

SW-10-SU-7

LAB NAME: Adirondack Environmental

CONTRACT:

LAB CODE: AES

Case No.: ESE 0701

SAS No.:

SDG No.: SW-1-SU-7

Matrix (soil/water): Water

Lab Sample ID: 070622041-006

Level (Low/Med): Low

Date Received: 6/22/07

% Solids: 0.0

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

Analyte	Concentration	C	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

: 00018

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

SW-11-SU-7

LAB NAME: Adirondack Environmental

CONTRACT:

LAB CODE: AES

Case No.: ESE 0701

SAS No.:

SDG No.: SW-1-SU-7

Matrix (soil/water): Water

Lab Sample ID: 070622041-007

Level (Low/Med): Low

Date Received: 6/22/07

% Solids: 0.0

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

Analyte	Concentration	C	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

: 00019

USEPA - CLP

6

DUPLICATES

SAMPLE NO.

SW-11-SU-7DP

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7Matrix (soil/water): WATER Level (low/med): LOW% Solids for Sample: 0.0 % Solids for Duplicate: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		127.0334	B	131.5536	B	3.5		P
Antimony		16.2000	U	16.2000	U			P
Arsenic		2.4000	U	2.4000	U			P
Barium		8.5331	B	8.5142	B	0.2		P
Beryllium		0.3000	U	0.3000	U			P
Cadmium		0.5000	U	0.5000	U			P
Calcium	5000.0	17224.6538		17209.7900		0.1		P
Chromium		2.7000	U	2.7000	U			P
Cobalt		0.9000	U	0.9000	U			P
Copper		11.9008	B	10.6302	B	11.3		P
Iron	100.0	256.1508		255.5509		0.2		P
Mercury		0.1700	B	0.1200	B	34.5		CV
Lead		1.6000	U	1.6000	U			P
Magnesium		4399.1669	B	4380.7810	B	0.4		P
Manganese	15.0	28.2486		28.1704		0.3		P
Nickel		0.9000	U	0.9000	U			P
Potassium		661.3654	B	657.8484	B	0.5		P
Selenium		2.4000	U	2.4000	U			P
Silver		1.8000	U	1.8000	U			P
Sodium	5000.0	9740.7425		9879.9960		1.4		P
Thallium		1.6425	B	2.6104	B	45.5		P
Vanadium		4.2000	U	4.2000	U			P
Zinc		3.3365	B	3.3067	B	0.9		P

U.S. EPA - CLP

6

DUPLICATES

SW-11-SU-7

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 for Sample: 0.0

% Solids for Duplicate: 0.0

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

Analyte	Control Limit % R	Sample (S)	C	Duplicate (D)	C	% R	Q	M
TKN as N								
Ammonia, as N								
Nitrate								
COD								
BOD 5								
TOC								
TDS								
Sulfate								
Alkalinity								
Total Phenols								
Chloride								
Bromide								
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								
Hexavalent Chromium								

Comments

FORM VI - CONV

: 00021

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

SW-11-SU-7MS

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7Matrix (soil/water): WATERLevel (low/med): LOW% Solids for Sample: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75 - 125	2218.5350		127.0334	B	2000.00	104.6		P
Antimony	75 - 125	549.0710		16.2000	U	500.00	109.8		P
Arsenic	75 - 125	45.0405		2.4000	U	40.00	112.6		P
Barium	75 - 125	2123.2930		8.5331	B	2000.00	105.7		P
Beryllium	75 - 125	56.2271		0.3000	U	50.00	112.5		P
Cadmium	75 - 125	52.0083		0.5000	U	50.00	104.0		P
Calcium		17964.8500		17224.6538		0.00	0.0		P
Chromium	75 - 125	207.5372		2.7000	U	200.00	103.8		P
Cobalt	75 - 125	521.0366		0.9000	U	500.00	104.2		P
Copper	75 - 125	261.9356		11.9008	B	250.00	100.0		P
Iron	75 - 125	1369.1310		256.1508		1000.00	111.3		P
Mercury	75 - 125	1.6500		0.1700	B	2.00	74.0	N	CV
Lead	75 - 125	18.5130		1.6000	U	20.00	92.6		P
Magnesium		4567.3650	B	4399.1669	B	0.00	0.0		P
Manganese	75 - 125	556.5197		28.2486		500.00	105.7		P
Nickel	75 - 125	539.7547		0.9000	U	500.00	108.0		P
Potassium		679.7034	B	661.3654	B	0.00	0.0		P
Selenium	75 - 125	11.7786		2.4000	U	10.00	117.8		P
Silver	75 - 125	46.1470		1.8000	U	50.00	92.3		P
Sodium		9829.7810		9740.7425		0.00	0.0		P
Thallium	75 - 125	44.0802		1.6425	B	50.00	84.9		P
Vanadium	75 - 125	528.6507		4.2000	U	500.00	105.7		P
Zinc	75 - 125	548.0071		3.3365	B	500.00	108.9		P

Comments:

USEPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

SW-11-SU-7A

Lab Name: Adirondack EnvironmentalContract: Black Ash PondLab Code: AESCase No.: ESE 0701

SAS No.: _____

SDG No.: SW-1-SU-7Matrix (soil/water): WATERLevel (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		3729.03		127.03	B	4000.0	90.0		P
Antimony		924.50		16.20	U	1000.0	92.4		P
Arsenic		77.35		2.40	U	80.0	96.7		P
Barium		3591.13		8.53	B	4000.0	89.6		P
Beryllium		94.63		0.30	U	100.0	94.6		P
Cadmium		93.18		0.50	U	100.0	93.2		P
Calcium		17041.60		17224.65		0.0	0.0		P
Chromium		358.92		2.70	U	400.0	89.7		P
Cobalt		932.20		0.90	U	1000.0	93.2		P
Copper		452.55		11.90	B	500.0	88.1		P
Iron		2224.05		256.15		2000.0	98.4		P
Lead		34.42		1.60	U	40.0	86.0		P
Magnesium		4308.68	B	4399.17	B	0.0	0.0		P
Manganese		973.98		28.25		1000.0	94.6		P
Nickel		968.06		0.90	U	1000.0	96.8		P
Potassium		652.64	B	661.37	B	0.0	0.0		P
Selenium		24.78		2.40	U	20.0	123.9		P
Silver		83.98		1.80	U	100.0	84.0		P
Sodium		9899.61		9740.74		0.0	0.0		P
Thallium		80.33		1.64	B	100.0	78.7		P
Vanadium		911.44		4.20	U	1000.0	91.1		P
Zinc		975.11		3.34	B	1000.0	97.2		P

Comments: _____

U.S. EPA - CLP

5

SPIKE SAMPLE RECOVERY

SW-11-SU-7

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

Analyte	Control Limit % R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	% R	Q	M
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols									
Chloride									
Bromide									
Eh									
Specific Conductance									
Cyanide	75-125	92		10	U	100	92		
pH									
Turbidity									
Color									
Hexavalent Chromium									

Comments

FORM V (Part 1) - CONV

: 00024

USEPA - CLP

3

BLANKS

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7Preparation Blank Matrix (soil/water): WATERPreparation Blank Concentration Units (ug/L or mg/kg): UG/L

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

USEPA - CLP

3

BLANKS

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7Preparation Blank Matrix (soil/water): WATERPreparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	Continuing Calibration Blank (ug/L)						Preparation Blank	C	M
		1	C	2	C	3	C			
Aluminum		29.8	B	7.8	B	9.7	B			P
Antimony		16.2	U	16.2	U	16.2	U			P
Arsenic		2.4	U	2.4	U	2.4	U			P
Barium		3.4	U	3.4	U	3.4	U			P
Beryllium		0.3	U	0.3	U	0.3	U			P
Cadmium		0.5	U	0.5	U	0.5	U			P
Calcium		6.9	U	6.9	U	6.9	U			P
Chromium		2.7	U	2.7	U	2.7	U			P
Cobalt		0.9	U	0.9	U	0.9	U			P
Copper		2.0	U	2.0	U	2.0	U			P
Iron		7.3	U	7.3	U	7.3	U			P
Mercury		0.06	U	0.06	U					CV
Lead		1.6	U	1.6	U	1.6	U			P
Magnesium		9.2	U	9.2	U	9.2	U			P
Manganese		0.3	U	0.3	U	0.3	U			P
Nickel		0.9	U	0.9	U	0.9	U			P
Potassium		3.2	U	3.2	U	3.2	U			P
Selenium		2.4	U	2.4	U	2.4	U			P
Silver		1.8	U	1.8	U	1.8	U			P
Sodium		8.9	B	25.7	B	24.2	B			P
Thallium		1.6	U	1.6	U	1.6	U			P
Vanadium		4.2	U	4.2	U	4.2	U			P
Zinc		0.7	U	0.7	U	0.7	U			P

USEPA - CLP

3

BLANKS

Lab Name: Adirondack EnvironmentalContract: Black Ash PondLab Code: AESCase No.: ESE 0701

SAS No.: _____

SDG No.: SW-1-SU-7Preparation Blank Matrix (soil/water): WATERPreparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Preparation Blank	C	M
			1	C	2	C	3	C			
Aluminum			13.7	B							P
Antimony			16.2	U							P
Arsenic			2.4	U							P
Barium			3.4	U							P
Beryllium			0.3	U							P
Cadmium			0.5	U							P
Calcium			6.9	U							P
Chromium			2.7	U							P
Cobalt			0.9	U							P
Copper			2.0	U							P
Iron			7.3	U							P
Lead			1.6	U							P
Magnesium			9.2	U							P
Manganese			0.3	U							P
Nickel			0.9	U							P
Potassium			3.2	U							P
Selenium			2.4	U							P
Silver			1.8	U							P
Sodium			8.6	U							P
Thallium			1.6	U							P
Vanadium			4.2	U							P
Zinc			0.7	U							P

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental

CONTRACT:

LAB CODE: AES

Case No.: ESE 0701

SAS No.:

SDG No.: SW-1-SU-7

Preparation Blank Matrix:

Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration						Prep. Blank C	Method
			1	C	2	C	3	C		
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	10	U	10	U
pH										EPA 150.1
Turbidity										EPA 180.1
Color										EPA 110.2
Hexavalent Chromium										SW 7196

Comments

FORM III - CONV

: 00028

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental

CONTRACT:

LAB CODE: AES

Case No.: ESE 0701

SAS No.:

SDG No.: SW-1-SU-7

Preparation Blank Matrix:

Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration						Prep. Blank C	Method
			1	C	2	C	3	C		
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

: 00029

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>	<u>Laboratory Sample ID</u>	<u>Date Received</u>	<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.

Conventional

- 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."

A handwritten signature in black ink, appearing to read "V. [unclear]", is written over a horizontal line.

Laboratory Manager

Date: _____

9/4/07



314 North Pearl Street
Albany, New York 12207
518-434-4546/434-0891 FAX

CHAIN OF CUSTODY RECORD

Experience is the solution

A full service analytical research laboratory offering solutions to environmental concerns

Client Name: Earth Science Engineering P.C. Address: 3271 Main Street, P.O. Box 398, Willsboro, NY 12896

Send Report To: Douglas R. Ferris, P.E. Project Name (Location): Black Ash Pond (Willsboro) Samplers (Names): John M. Kanoz

Client Phone No: (518) 463-8133 Client Fax No: (518) 463-7490 PO Number: P-01-002I Samplers (Signature): [Signature]

AES Sample Number	Client Sample Identification & Location	Date Sampled	Time A=a.m. P=p.m.	Sample Type			Number of Cont's	Analysis Required
				Matrix	Comp	Grab		
001	SW-1-Su-07	6/21	2:10	A	W		3	TAL Metals, Tot. Cyanide
002	SW-2-Su-07	"	2:05	A	W		1	Turbidity, PH-w
003	SW-3-Su-07	"	8:00	A	W			"
004	SW-6-Su-07	"	2:00	A	W			"
005	SW-9-Su-07	"	8:30	A	W			"
006	SW-10-Su-07	"	9:00	A	W			"
007	SW-11-Su-07	"	9:30	A	W			"
sm 008	MS1-SW-11-Su-07	"	9:30	A	W			"
6/22/07	MSD1-SW-11-Su-07	"	9:30	A	W			"
	mw-6-Su-07			A				
				A				
				P				
				A				
				P				
				A				
				P				

AES Work Order #: 070622041 CC Report To / Special Instructions/Remarks:

Turnaround Time Request: ☐ 1 Day ☐ 3 Day ☒ Normal ☐ 2 Day ☐ 5 Day

Relinquished by: (Signature) [Signature] 6/21/07 Received by: (Signature) [Signature] Date/Time 6/21/07 11:45
Relinquished by: (Signature) [Signature] Received by: (Signature) [Signature] Date/Time 6/21/07 3:00pm
Relinquished by: (Signature) [Signature] Received by: (Signature) [Signature] Date/Time 6/22/07 12:14pm

TEMPERATURE Ambient or Chilled (Chilled) PROPERLY PRESERVED (Y) N RECEIVED WITHIN HOLDING TIMES (Y) N
Notes: 11 Notes: Notes:

WHITE - Lab Copy

YELLOW - Sampler Copy

PINK - Generator Copy

Adirondack Environmental Services, Inc.

: 00033

Adirondack Environmental Services, Inc

314 N. Pearl St
Albany, NY 12207
(518) 434-4546

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

WorkOrder: 070622041

Client:

Earth Science Engineering, P.C.
24 South Main Street
Willsboro, NY 12996

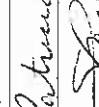
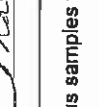
TEL: (518) 963-8133
FAX: (518) 963-7490
ProjectNo: Willsboro / Black
PO:

22-Jun-07

Sample ID	ClientSampleID	Matrix	Collection Date	Bottle	Requested Tests			
					CYANIDE	CP METALS	WERCURY	PH W TURBIDITY

070622041-007	SW-11-SU-07	Water	6/21/2007 9:30:00 AM		B	A	A	C	C
070622041-006	SW-10-SU-07	Water	6/21/2007 9:00:00 AM		B	A	A	C	C
070622041-005	SW-9-SU-07	Water	6/21/2007 8:30:00 AM		B	A	A	C	C
070622041-004	SW-6-SU-07	Water	6/21/2007 2:00:00 PM		B	A	A	C	C
070622041-003	SW-3-SU-07	Water	6/21/2007 8:00:00 AM		B	A	A	C	C
070622041-002	SW-2-SU-07	Water	6/21/2007 2:05:00 PM		B	A	A	C	C
070622041-001	SW-1-SU-07	Water	6/21/2007 2:10:00 PM		B	A	A	C	C

Comments:

	Date/Time	Date/Time
Relinquished by: 	6-22-07 12:40	Received by:  6-22-07 14:00
Relinquished by: 	7/2/07 10:00	Received by:  7/2/07 1700
Relinquished by: 	6/24/07 10:00	Received by:  6/24/07 12:00

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.

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

00034

INORGANIC - METALS
ANALYSIS

USEPA - CLP

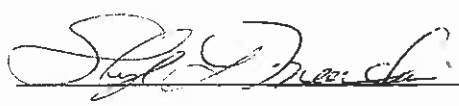
COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7SOW No.: N/A

<u>EPA Sample No.</u>	<u>Lab Sample ID.</u>
<u>SW-1-SU-7</u>	<u>070622041-001A</u>
<u>SW-2-SU-7</u>	<u>070622041-002A</u>
<u>SW-3-SU-7</u>	<u>070622041-003A</u>
<u>SW-6-SU-7</u>	<u>070622041-004A</u>
<u>SW-9-SU-7</u>	<u>070622041-005A</u>
<u>SW-10-SU-7</u>	<u>070622041-006A</u>
<u>SW-11-SU-7</u>	<u>070622041-007A</u>

Were ICP interelement corrections applied? Yes/No YESWere ICP background corrections applied? Yes/No YESIf yes-were raw data generated before
application of background corrections? Yes/No NOComments:

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: Name: Sheryl MartucciDate: 9/4/02Title: Inorganics Manager

USEPA - CLP

-1-

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.: _____ SDG No.: SW-1-SU-7

Matrix (soil/water): WATER Lab Sample ID: 070622041-001A

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	C	Q	M
7429-90-5	Aluminum	79.3	B		P
7440-36-0	Antimony	54.2	B		P
7440-38-2	Arsenic	7.3	B		P
7440-39-3	Barium	6.9	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	0.50	U		P
7440-70-2	Calcium	17600		E	P
7440-47-3	Chromium	2.7	U		P
7440-48-4	Cobalt	0.90	U		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	U		P
7439-95-4	Magnesium	4280	B	E	P
7439-96-5	Manganese	18.7		E	P
7440-02-0	Nickel	0.90	U		P
7440-09-7	Potassium	789	B		P
7782-49-2	Selenium	8.4			P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium	6870		E	P
7440-28-0	Thallium	6.9	B		P
7440-62-2	Vanadium	4.2	U		P
7440-66-6	Zinc	3.7	B		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SW-2-SU-7

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7Matrix (soil/water): WATER Lab Sample ID: 070622041-002ALevel (low/med): LOW Date Received: 6/22/2007% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

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

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SW-3-SU-7

Lab Name: Adirondack Environmental Contract: Black Ash Pond

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

Matrix (soil/water): WATER Lab Sample ID: 070622041-003A

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	C	Q	M
7429-90-5	Aluminum	65.1	B		P
7440-36-0	Antimony	26.4	B		P
7440-38-2	Arsenic	7.4	B		P
7440-39-3	Barium	7.1	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	0.50	U		P
7440-70-2	Calcium	17900		E	P
7440-47-3	Chromium	2.7	U		P
7440-48-4	Cobalt	0.90	U		P
7440-50-8	Copper	5.6	B		P
7439-89-6	Iron	207			P
7439-97-6	Mercury	0.18	B	N	CV
7439-92-1	Lead	1.6	U		P
7439-95-4	Magnesium	4500	B	E	P
7439-96-5	Manganese	18.6		E	P
7440-02-0	Nickel	0.90	U		P
7440-09-7	Potassium	685	B		P
7782-49-2	Selenium	4.9	B		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium	6940		E	P
7440-28-0	Thallium	4.5	B		P
7440-62-2	Vanadium	4.2	U		P
7440-66-6	Zinc	1.5	B		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SW-6-SU-7

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7Matrix (soil/water): WATER Lab Sample ID: 070622041-004ALevel (low/med): LOW Date Received: 6/22/2007% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

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

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SW-9-SU-7

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7Matrix (soil/water): WATER Lab Sample ID: 070622041-005ALevel (low/med): LOW Date Received: 6/22/2007% Solids: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

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

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

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.: SW-1-SU-7
 Matrix (soil/water): WATER Lab Sample ID: 070622041-006A
 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	C	Q	M
7429-90-5	Aluminum	108	B		P
7440-36-0	Antimony	16.2	U		P
7440-38-2	Arsenic	2.4	U		P
7440-39-3	Barium	7.5	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	0.50	U		P
7440-70-2	Calcium	16900		E	P
7440-47-3	Chromium	2.7	U		P
7440-48-4	Cobalt	0.90	U		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	U		P
7439-95-4	Magnesium	4330	B	E	P
7439-96-5	Manganese	26.3		E	P
7440-02-0	Nickel	0.90	U		P
7440-09-7	Potassium	575	B		P
7782-49-2	Selenium	2.4	U		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium	9750		E	P
7440-28-0	Thallium	2.0	B		P
7440-62-2	Vanadium	4.2	U		P
7440-66-6	Zinc	3.1	B		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

-1-

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

SW-11-SU-7

Lab Name: Adirondack Environmental Contract: Black Ash Pond

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

Matrix (soil/water): WATER Lab Sample ID: 070622041-007A

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	C	Q	M
7429-90-5	Aluminum	127	B		P
7440-36-0	Antimony	16.2	U		P
7440-38-2	Arsenic	2.4	U		P
7440-39-3	Barium	8.5	B		P
7440-41-7	Beryllium	0.30	U		P
7440-43-9	Cadmium	0.50	U		P
7440-70-2	Calcium	17200		E	P
7440-47-3	Chromium	2.7	U		P
7440-48-4	Cobalt	0.90	U		P
7440-50-8	Copper	11.9	B		P
7439-89-6	Iron	256			P
7439-97-6	Mercury	0.17	B	N	CV
7439-92-1	Lead	1.6	U		P
7439-95-4	Magnesium	4400	B	E	P
7439-96-5	Manganese	28.2		E	P
7440-02-0	Nickel	0.90	U		P
7440-09-7	Potassium	661	B		P
7782-49-2	Selenium	2.4	U		P
7440-22-4	Silver	1.8	U		P
7440-23-5	Sodium	9740		E	P
7440-28-0	Thallium	1.6	B		P
7440-62-2	Vanadium	4.2	U		P
7440-66-6	Zinc	3.3	B		P

Color Before: _____ Clarity Before: _____ Texture: _____

Color After: _____ Clarity After: _____ Artifacts: _____

Comments: _____

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7Initial Calibration Source: EPA-ICVContinuing Calibration Source: EPA-LV

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
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	1970.37	98.5	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	P
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	2.01	100.5	2.0	2.00	100.0	1.99	99.5	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	109.8	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

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7Initial Calibration Source: EPA-ICVContinuing Calibration Source: EPA-LV

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				2000.0	2174.92	108.7	2156.37	107.8	P
Antimony				2000.0	1968.36	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				2000.0	2092.55	104.6	2059.58	103.0	P
Cadmium				2000.0	2130.92	106.5	2113.00	105.6	P
Calcium				2000.0	2115.56	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	1969.53	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	2199.19	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	2190.65	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

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7Initial Calibration Source: EPA-ICVContinuing Calibration Source: EPA-LV

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				2000.0	2167.37	108.4	2146.32	107.3	P
Antimony				2000.0	1963.59	98.2	1974.77	98.7	P
Arsenic				2000.0	2029.21	101.5	2003.89	100.2	P
Barium				2000.0	2071.92	103.6	2051.46	102.6	P
Beryllium				2000.0	2051.85	102.6	2037.37	101.9	P
Cadmium				2000.0	2130.77	106.5	2110.60	105.5	P
Calcium				2000.0	2038.19	101.9	2019.03	101.0	P
Chromium				2000.0	2012.09	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	P
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				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	P
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

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2A

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7Initial Calibration Source: EPA-ICVContinuing Calibration Source: EPA-LV

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	
Aluminum				2000.0	2117.47	105.9			P
Antimony				2000.0	1986.61	99.3			P
Arsenic				2000.0	2000.72	100.0			P
Barium				2000.0	2043.62	102.2			P
Beryllium				2000.0	2028.87	101.4			P
Cadmium				2000.0	2105.54	105.3			P
Calcium				2000.0	2017.08	100.9			P
Chromium				2000.0	1996.30	99.8			P
Cobalt				2000.0	2043.56	102.2			P
Copper				2000.0	2010.20	100.5			P
Iron				2000.0	2079.37	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			P
Potassium				10000.0	9678.26	96.8			P
Selenium				2000.0	2002.97	100.1			P
Silver				500.0	487.67	97.5			P
Sodium				2000.0	1817.31	90.9			P
Thallium				2000.0	1986.57	99.3			P
Vanadium				2000.0	1996.16	99.8			P
Zinc				2000.0	2042.23	102.1			P

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

USEPA - CLP

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7

AA CRDL Standard Source: _____

ICP CRDL Standard Source: INOR-VEN

Concentration Units: ug/L

Analyte				CRDL Standard for ICP				
	True	Found	%R	Initial True	Initial Found	Initial %R	Final Found	Final %R
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				40.0	40.78	102.0	37.03	92.6

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

USEPA - CLP

3

BLANKS

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7Preparation Blank Matrix (soil/water): WATERPreparation Blank Concentration Units (ug/L or mg/kg): UG/L

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

USEPA - CLP

3

BLANKS

Lab Name: Adirondack EnvironmentalContract: Black Ash PondLab Code: AESCase No.: ESE 0701

SAS No.: _____

SDG No.: SW-1-SU-7Preparation Blank Matrix (soil/water): WATERPreparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Preparation Blank	C	M
			1	C	2	C	3	C			
Aluminum			29.8	B	7.8	B	9.7	B			P
Antimony			16.2	U	16.2	U	16.2	U			P
Arsenic			2.4	U	2.4	U	2.4	U			P
Barium			3.4	U	3.4	U	3.4	U			P
Beryllium			0.3	U	0.3	U	0.3	U			P
Cadmium			0.5	U	0.5	U	0.5	U			P
Calcium			6.9	U	6.9	U	6.9	U			P
Chromium			2.7	U	2.7	U	2.7	U			P
Cobalt			0.9	U	0.9	U	0.9	U			P
Copper			2.0	U	2.0	U	2.0	U			P
Iron			7.3	U	7.3	U	7.3	U			P
Mercury			0.06	U	0.06	U					CV
Lead			1.6	U	1.6	U	1.6	U			P
Magnesium			9.2	U	9.2	U	9.2	U			P
Manganese			0.3	U	0.3	U	0.3	U			P
Nickel			0.9	U	0.9	U	0.9	U			P
Potassium			3.2	U	3.2	U	3.2	U			P
Selenium			2.4	U	2.4	U	2.4	U			P
Silver			1.8	U	1.8	U	1.8	U			P
Sodium			8.9	B	25.7	B	24.2	B			P
Thallium			1.6	U	1.6	U	1.6	U			P
Vanadium			4.2	U	4.2	U	4.2	U			P
Zinc			0.7	U	0.7	U	0.7	U			P

USEPA - CLP

3

BLANKS

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7Preparation Blank Matrix (soil/water): WATERPreparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L)						Preparation Blank	C	M
			1	C	2	C	3	C			
Aluminum			13.7	B							P
Antimony			16.2	U							P
Arsenic			2.4	U							P
Barium			3.4	U							P
Beryllium			0.3	U							P
Cadmium			0.5	U							P
Calcium			6.9	U							P
Chromium			2.7	U							P
Cobalt			0.9	U							P
Copper			2.0	U							P
Iron			7.3	U							P
Lead			1.6	U							P
Magnesium			9.2	U							P
Manganese			0.3	U							P
Nickel			0.9	U							P
Potassium			3.2	U							P
Selenium			2.4	U							P
Silver			1.8	U							P
Sodium			8.6	U							P
Thallium			1.6	U							P
Vanadium			4.2	U							P
Zinc			0.7	U							P

USEPA - CLP

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: Adirondack Environmental Contract: Black Ash Pond

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

ICP ID Number: ICP4 ICS Source: EPA

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	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		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	83.8		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		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

USEPA - CLP

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

SW-11-SU-7MS

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7Matrix (soil/water): WATER Level (low/med): LOW% Solids for Sample: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum	75 - 125	2218.5350		127.0334	B	2000.00	104.6		P
Antimony	75 - 125	549.0710		16.2000	U	500.00	109.8		P
Arsenic	75 - 125	45.0405		2.4000	U	40.00	112.6		P
Barium	75 - 125	2123.2930		8.5331	B	2000.00	105.7		P
Beryllium	75 - 125	56.2271		0.3000	U	50.00	112.5		P
Cadmium	75 - 125	52.0083		0.5000	U	50.00	104.0		P
Calcium		17964.8500		17224.6538		0.00	0.0		P
Chromium	75 - 125	207.5372		2.7000	U	200.00	103.8		P
Cobalt	75 - 125	521.0366		0.9000	U	500.00	104.2		P
Copper	75 - 125	261.9356		11.9008	B	250.00	100.0		P
Iron	75 - 125	1369.1310		256.1508		1000.00	111.3		P
Mercury	75 - 125	1.6500		0.1700	B	2.00	74.0	N	CV
Lead	75 - 125	18.5130		1.6000	U	20.00	92.6		P
Magnesium		4567.3650	B	4399.1669	B	0.00	0.0		P
Manganese	75 - 125	556.5197		28.2486		500.00	105.7		P
Nickel	75 - 125	539.7547		0.9000	U	500.00	108.0		P
Potassium		679.7034	B	661.3654	B	0.00	0.0		P
Selenium	75 - 125	11.7786		2.4000	U	10.00	117.8		P
Silver	75 - 125	46.1470		1.8000	U	50.00	92.3		P
Sodium		9829.7810		9740.7425		0.00	0.0		P
Thallium	75 - 125	44.0802		1.6425	B	50.00	84.9		P
Vanadium	75 - 125	528.6507		4.2000	U	500.00	105.7		P
Zinc	75 - 125	548.0071		3.3365	B	500.00	108.9		P

Comments:

USEPA - CLP

5B

POST DIGEST SPIKE SAMPLE RECOVERY

SAMPLE NO.

SW-11-SU-7A

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum		3729.03		127.03	B	4000.0	90.0		P
Antimony		924.50		16.20	U	1000.0	92.4		P
Arsenic		77.35		2.40	U	80.0	96.7		P
Barium		3591.13		8.53	B	4000.0	89.6		P
Beryllium		94.63		0.30	U	100.0	94.6		P
Cadmium		93.18		0.50	U	100.0	93.2		P
Calcium		17041.60		17224.65		0.0	0.0		P
Chromium		358.92		2.70	U	400.0	89.7		P
Cobalt		932.20		0.90	U	1000.0	93.2		P
Copper		452.55		11.90	B	500.0	88.1		P
Iron		2224.05		256.15		2000.0	98.4		P
Lead		34.42		1.60	U	40.0	86.0		P
Magnesium		4308.68	B	4399.17	B	0.0	0.0		P
Manganese		973.98		28.25		1000.0	94.6		P
Nickel		968.06		0.90	U	1000.0	96.8		P
Potassium		652.64	B	661.37	B	0.0	0.0		P
Selenium		24.78		2.40	U	20.0	123.9		P
Silver		83.98		1.80	U	100.0	84.0		P
Sodium		9899.61		9740.74		0.0	0.0		P
Thallium		80.33		1.64	B	100.0	78.7		P
Vanadium		911.44		4.20	U	1000.0	91.1		P
Zinc		975.11		3.34	B	1000.0	97.2		P

Comments: _____

USEPA - CLP

6

DUPLICATES

SAMPLE NO.

SW-11-SU-7DP

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7Matrix (soil/water): WATER Level (low/med): LOW% Solids for Sample: 0.0 % Solids for Duplicate: 0.0Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum		127.0334	B	131.5536	B	3.5		P
Antimony		16.2000	U	16.2000	U			P
Arsenic		2.4000	U	2.4000	U			P
Barium		8.5331	B	8.5142	B	0.2		P
Beryllium		0.3000	U	0.3000	U			P
Cadmium		0.5000	U	0.5000	U			P
Calcium	5000.0	17224.6538		17209.7900		0.1		P
Chromium		2.7000	U	2.7000	U			P
Cobalt		0.9000	U	0.9000	U			P
Copper		11.9008	B	10.6302	B	11.3		P
Iron	100.0	256.1508		255.5509		0.2		P
Mercury		0.1700	B	0.1200	B	34.5		CV
Lead		1.6000	U	1.6000	U			P
Magnesium		4399.1669	B	4380.7810	B	0.4		P
Manganese	15.0	28.2486		28.1704		0.3		P
Nickel		0.9000	U	0.9000	U			P
Potassium		661.3654	B	657.8484	B	0.5		P
Selenium		2.4000	U	2.4000	U			P
Silver		1.8000	U	1.8000	U			P
Sodium	5000.0	9740.7425		9879.9960		1.4		P
Thallium		1.6425	B	2.6104	B	45.5		P
Vanadium		4.2000	U	4.2000	U			P
Zinc		3.3365	B	3.3067	B	0.9		P

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LABORATORY CONTROL SAMPLE

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7

Solid LCS Source: _____

Aqueous LCS Source: EPA-ICV

Analyte	Aqueous (ug/L)			Solid (mg/kg)				
	True	Found	%R	True	Found	C	Limits	%R
Aluminum	2000.0	2173.3680	108.7					
Antimony	2000.0	1955.5100	97.8					
Arsenic	2000.0	2040.8890	102.0					
Barium	2000.0	2028.5740	101.4					
Beryllium	2000.0	2068.3420	103.4					
Cadmium	2000.0	2113.9860	105.7					
Calcium	2000.0	2067.4340	103.4					
Chromium	2000.0	1987.1780	99.4					
Cobalt	2000.0	2086.8730	104.3					
Copper	2000.0	1986.3560	99.3					
Iron	2000.0	2119.7780	106.0					
Mercury	2.0	1.80	90.0					
Lead	2000.0	2218.8840	110.9					
Magnesium	2000.0	2040.7490	102.0					
Manganese	2000.0	2021.1060	101.1					
Nickel	2000.0	2145.5090	107.3					
Potassium	10000.0	9881.8280	98.8					
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					
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 ADD		2 ADD		3 ADD		Final Conc.	r	Q
			CON	ABS	CON	ABS	CON	ABS			

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ICP SERIAL DILUTIONS

SAMPLE NO.

SW-11-SU-7L

Lab Name: Adirondack EnvironmentalContract: Black Ash PLab Code: AES Case No.: ESE 0701SAS No.: _____ SDG No.: SW-1-SU-7Matrix (soil/water): WATERLevel (low/med): LOWConcentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Differ- ence	Q	M
Aluminum	127.03		359.99	B	183.4		P
Antimony	16.20	U	91.77	B	100.0		P
Arsenic	1.62	B	12.00	U	100.0		P
Barium	8.53	B	17.00	U	100.0		P
Beryllium	0.30	U	1.50	U			P
Cadmium	0.50	U	2.50	U			P
Calcium	17224.65		19918.30	B	15.6	E	P
Chromium	2.70	U	13.50	U			P
Cobalt	0.90	U	4.50	U			P
Copper	11.90		14.97	B	25.8		P
Iron	256.15		294.04	B	14.8		P
Lead	1.60	U	8.00	U			P
Magnesium	4399.17		5388.02	B	22.5	E	P
Manganese	28.25		32.04	B	13.4	E	P
Nickel	0.90	U	4.50	U			P
Potassium	661.37	B	640.59	B	3.1		P
Selenium	2.40	U	12.00	U			P
Silver	0.47	B	9.00	U	100.0		P
Sodium	9740.74		11504.94	B	18.1	E	P
Thallium	1.64	B	10.85	B	561.6		P
Vanadium	4.20	U	21.00	U			P
Zinc	3.34	B	4.98	B	49.1		P

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7ICP ID Number: _____ Date: 2/6/2007Flame AA ID Number: CVAA

Furnace AA ID Number: _____

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

Comments: _____

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7ICP ID Number: ICP4 Date: 2/6/2007

Flame AA ID Number: _____

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Aluminum	308.22		200	5.2	P
Antimony	206.83		60	16.2	P
Arsenic	189.04		10	2.4	P
Barium	493.41		200	3.4	P
Beryllium	313.04		5	0.3	P
Boron	249.68		50	7.4	P
Cadmium	226.50		5	0.5	P
Calcium	317.93		5000	6.9	P
Chromium	267.72		10	2.7	P
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	P
Selenium	196.02		5	2.4	P
Silver	328.07		10	1.8	P
Sodium	588.9		5000	8.6	P
Thallium	190.86		10	1.6	P
Vanadium	292.40		50	4.2	P
Zinc	206.2		20	0.7	P

Comments: _____

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11A
ICP INTERELEMENT CORRECTION FACTORS (ANNUALLY)

Lab Name: Adirondack Environmental Contract: Black Ash Pond

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

ICP ID Number: ICP4 Date: 4/5/2007

Analyte	Wave-length (nm)	Interelement Correction Factors for:				
		Al	Ca	Fe	Mg	Rh
Aluminum	308.20	0.0000000	0.0000000	0.0000000	0.0000000	
Antimony	206.80	0.0000000	0.0000000	0.0000000	0.0000000	
Arsenic	193.70	0.0001270	0.0000000	0.0000000	0.0000000	
Barium	493.40	0.0000000	0.0000000	0.0000000	0.0000000	
Beryllium	313.00	0.0000000	0.0000000	0.0000000	0.0000000	
Cadmium	228.80	0.0000000	0.0000000	0.0000000	0.0000000	
Calcium	317.90	0.0000000	0.0000000	0.0000000	0.0000000	
Chromium	357.80	0.0000000	0.0000000	0.0001400	0.0000000	
Cobalt	228.60	0.0000000	0.0000000	0.0000000	0.0000000	
Copper	324.70	0.0000000	0.0000000	0.0000000	0.0000000	
Iron	259.90	0.0001900	0.0000000	0.0000000	0.0000000	
Lead	220.30	0.0001020	0.0000000	0.0008420	0.0000000	
Magnesium	383.80	0.0000000	0.0000000	0.0000000	0.0000000	
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	
Selenium	196.00	0.0000000	0.0000000	0.0000000	0.0000000	
Silver	328.00	0.0000000	0.0000000	0.0000000	0.0000000	
Sodium	588.90	0.0000000	0.0000000	0.0000000	0.0000000	
Thallium	190.80	0.0000000	0.0008600	0.0000000	0.0000000	
Tin	189.90	0.0000000	0.0000000	0.0000000	0.0000000	
Vanadium	292.40	0.0006000	0.0000000	0.0000000	0.0000000	
Zinc	213.80	0.0000000	0.0000000	0.0001040	0.0000000	

Comments: _____

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ICP LINEAR RANGES (QUARTERLY)

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7ICP ID Number: ICP4 Date: 2/10/2007

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

Comments: _____

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PREPARATION LOG

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: SDG No.: SW-1-SU-7Method: 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

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PREPARATION LOG

Lab Name: Adirondack Environmental Contract: Black Ash PondLab Code: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7Method: 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 EnvironmentalContract: Black Ash PondLab Code: AESCase No.: ESE 0701SAS No.: _____ SDG No.: SW-1-SU-7Instrument ID Number: ICP4Method: PStart Date: 7/18/2007End Date: 7/18/2007

EPA Sample No.	D/F	Time	% R	Analytes																									
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S E	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	X	X	X	X	X	X	X	X	X	X	*	
200.7-1	1.00	1041		X					X						X			X	X			X				X			
200.7-2	1.00	1045					X	X				X	X	X		X													
200.7-3	1.00	1049							X						X									X				*	
200.7-4	1.00	1101			X																								
1 PPM AG	1.00	1110																			X								
200.7	1.00	1114				X					X									X					X				
ICV-1	1.00	1139		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
ICB-1	1.00	1140		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CRI-1	1.00	1145			X	X		X	X		X	X	X		X		X		X	X		X	X	X	X	X			
ICSA-1	1.00	1150		X					X				X		X														
ICSAB-1	1.00	1202		X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X		
CCV-1	1.00	1207		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCB-1	1.00	1211		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCV-2	1.00	1403		X	X	X	X	X	X	X	X	X	X	X	X	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	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	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	X	X		
SW-1-SU-7	1.00	1457		X	X	X	X	X	X	X	X	X	X	X	X	X	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	X	X	X	X	X	X	X	X	X	X	X	X	X		
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	X	X	X		
CCB-3	1.00	1515		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
SW-3-SU-7	1.00	1519		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
SW-6-SU-7	1.00	1524		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
SW-9-SU-7	1.00	1529		X	X	X	X	X	X	X	X	X	X	X	X	X	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	X	X	X	X	X	X	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	X	X	X	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	X	X	X	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	X	X	X	X	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	X	X	X	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	X	X	X	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	X	X		
CCB-4	1.00	1606		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCV-5	1.00	1714		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCB-5	1.00	1723		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCV-6	1.00	1810		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CCB-6	1.00	1814		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
CRI-2	1.00	1818			X	X		X	X		X	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: AES Case No.: ESE 0701 SAS No.: _____ SDG No.: SW-1-SU-7
 Instrument ID Number: ICP4 Method: P
 Start Date: 7/18/2007 End Date: 7/18/2007

EPA Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K E	S G	A G	N A	T L	V	Z N	C N
ICSA-2	1.00	1822		X					X				X		X												
ICSAB-2	1.00	1826		X			X	X	X	X	X	X	X	X	X	X		X			X			X	X		
CCV-7	1.00	1830		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		
CCB-7	1.00	1833		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X		

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ANALYSIS RUN LOG

Lab Name: Adirondack EnvironmentalContract: Black Ash PondLab Code: AESCase No.: ESE 0701

SAS No.: _____

SDG No.: SW-1-SU-7Instrument ID Number: CVAAMethod: CVStart Date: 6/27/2007End Date: 6/27/2007

EPA Sample No.	D/F	Time	% R	Analytes																							
				A L	S B	A S	B A	B E	C D	C A	C R	C O	C U	F E	P B	M G	M N	H G	N I	K	S E	A G	N A	T L	V	Z N	C N
ICV	1.00	1133																X									
ICB	1.00	1135																X									
CCV	1.00	1154																X									
CCB	1.00	1156																X									
CCV	1.00	1215																X									
CCB	1.00	1216																X									
CCV	1.00	1235																X									
CCB	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									
CCB	1.00	1257																X									
SW-9-SU-7	1.00	1259																X									
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									
CCB	1.00	1341																X									

RAW QC

DATA

Method: SPEX Sample Name: Blank

Operator:

Comment:

Run Time: 07/18/07 10:37 Type: Std Mode: IR Corr.Fact: 1.000000

Line	Ag3280	Al3082	Al3961	As1937	Au2427
328.068 {102}	308.215 {109}	396.152 { 85}	193.759 {173}	242.795 {138}	
Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	
.0263	.3685	.0430	.1083	-.0997	
.0215	.0156	.0803	.0179	.0476	
81.87	4.239	187.0	16.51	47.73	

1	.0416	.3796	-.0139	.1209	-.0660
2	.0111	.3575	.0998	.0957	-.1333

Line	B 2496	Ba4934	Be3130	Bi1902	Ca3179
249.678 {135}	493.409 { 68}	313.042 {107}	190.241 {176}	317.933 {105}	
Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	
.1691	2.441	.7578	.0219	-.0208	
.0061	.039	.0214	.0022	.0411	
3.622	1.591	2.830	9.970	198.0	

#1	.1648	2.469	.7730	.0204	.0083
#2	.1734	2.414	.7426	.0235	-.0499

Line	Cd2288	Co2286	Cr3578	Cu3247	Fe2599
228.802 {147}	228.616 {147}	357.869 { 94}	324.754 {103}	259.940 {129}	
Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	
-.0796	.0105	.0554	.1787	.5702	
.0340	.0550	.0039	.0020	.0184	
42.75	524.2	7.057	1.110	3.223	

#1	-.1037	.0494	.0582	.1773	.5572
#2	-.0555	-.0284	.0527	.1801	.5832

Line	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

Line	Mn2576	Mo2020	Na5889	Na5895	Ni2316
257.610 {131}	202.030 {166}	588.995 { 57}	589.592 { 57}	231.604 {145}	
Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	
.4665	.0083	-64.18	12.63	-.0457	
.0226	.0275	1.75	.61	.0384	
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

Line	Os2255	Pb2203	Pd3242	Pt2036	Pt2144
225.585 {149}	220.353 {152}	324.270 {103}	203.646 {164}	214.423 {156}	
Cts/S	Cts/S	Cts/S	Cts/S	Cts/S	
-.5591	.0441	-.0526	-.0096	.0309	
.0088	.0144	.0039	.0022	.0035	
1.570	32.63	7.458	22.81	11.32	

#1	-.5529	.0543	-.0499	-.0080	.0284
#2	-.5653	.0339	-.0554	-.0111	.0333

Sample Name: Blank Run Time: 07/18/07 10:37

Elem	Ru2402	Sb2068	Se1960	Si2881	Sn1899
Line	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	.3076	.0373	.0321	.0997	.0133
Stddev	.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

Elem	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	-.0224	.1213	-.0299	.0429	-.0238
Stddev	.0035	.0214	.0074	.0059	.0109
RSD	15.70	17.62	24.78	13.70	45.93

#1	-.0249	.1364	-.0352	.0388	-.0160
#2	-.0200	.1061	-.0247	.0471	-.0315

Elem	V 2924	W 2397	Zn2138	Zr3391
Line	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}
Units	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

Method: SPEX

Sample Name: 200.7-1

Operator:

Comment:

Run Time: 07/18/07 10:41 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Al3082	Al3961	Ca3179	K_7664	Mg3838
Line	308.215 {109}	396.152 { 85}	317.933 {105}	766.490 { 44}	383.826 { 87}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	30.64	218.7	191.8	1249.	100.7
Stddev	.19	.3	.5	8.	.2
SRSD	.6328	.1213	.2754	.6536	.2193

#1	30.78	218.8	192.2	1255.	100.9
#2	30.51	218.5	191.4	1243.	100.6

Elem	Na5889	Na5895	Ni2316	Zn2138
Line	588.995 { 57}	589.592 { 57}	231.604 {145}	213.856 {157}
Units	Cts/S	Cts/S	Cts/S	Cts/S
Avg	8698.	4683.	1080.	2851.
Stddev	1.	5.	1.	2.
SRSD	.0121	.1000	.0992	.0745

#1	8699.	4686.	1079.	2849.
#2	8697.	4679.	1081.	2852.

Method: SPEX

Sample Name: 200.7-2

Operator:

Comment:

Run Time: 07/18/07 10:45 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Ba4934	Be3130	Co2286	Cu3247	Fe2599
Line	493.409 { 68}	313.042 {107}	228.616 {147}	324.754 {103}	259.940 {129}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
Avg	1853.	1058.	643.3	39.59	5117.
Stddev	8.	1.	.7	.11	20.
%RSD	.4426	.0979	.1116	.2720	.3921

#1	1847.	1058.	642.8	39.66	5103.
#2	1859.	1059.	643.8	39.51	5132.

Elem	Mn2576	Sr3464
Line	257.610 {131}	346.446 { 97}
Units	Cts/S	Cts/S
Avg	1859.	177.4
Stddev	1.	.1
%RSD	.0534	.0363

#1	1859.	177.3
#2	1860.	177.4

Method: SPEX Sample Name: 200.7-3 Operator:
Comment:
Run Time: 07/18/07 10:49 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	B_2496	Cd2288	Pb2203	Tl1908
Line	249.678 {135}	228.802 {147}	220.353 {152}	190.864 {176}
Units	Cts/S	Cts/S	Cts/S	Cts/S
avg	30.01	198.8	33.21	10.50
Stddev	.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

Method: SPEX

Sample Name: 200.7-4

Operator:

Comment:

Run Time: 07/18/07 11:01 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Mo2020	Sb2068	Ti3361
Line	202.030 {166}	206.833 {162}	336.121 {100}
Units	Cts/S	Cts/S	Cts/S
Avg	1124.	226.8	641.1
Stddev	17.	6.5	1.8
%RSD	1.517	2.863	.2757
#1	1112.	222.2	642.4
#2	1136.	231.4	639.9

Method: SPEX Sample Name: 1 PPM AG Operator:
Comment:
Run Time: 07/18/07 11:10 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	Ag3280
Line	328.068 (102)
Units	Cts/S
Avg	32.32
Stddev	.00
RSD	.0065
#1	32.32
#2	32.32

Method: SPEX Sample Name: 200.7

Operator:

Comment:

Run Time: 07/18/07 11:14 Type: Std Mode: IR Corr.Fact: 1.000000

Elem	As1937	Cr3578	Li6103	Se1960	Sn1899
Line	193.759 {173}	357.869 { 94}	610.362 { 55}	196.090 {171}	189.989 {176}
Units	Cts/S	Cts/S	Cts/S	Cts/S	Cts/S
avg	33.30	34.28	413.6	28.27	72.87
Stddev	.03	.02	.5	.19	.34
RSD	.0995	.0535	.1251	.6852	.4723

#1	33.28	34.27	414.0	28.13	72.62
#2	33.33	34.29	413.3	28.41	73.11

Elem	V_2924
Line	292.402 {115}
Units	Cts/S
avg	24.58
Stddev	.13
RSD	.5325

#1	24.67
#2	24.48

El Name	Slope	Y-int	Correlation	Date Stdized
Ag3280	0.0323	0.0263	1.0000000	07/18/07 11:13:55
Al3082	0.0030	0.3685	1.0000000	07/18/07 10:44:32
Al3961	0.0219	0.0430	1.0000000	07/18/07 10:44:32
As1937	0.0166	0.1083	1.0000000	07/18/07 11:17:34
Au2427	0.0793	-0.0997	1.0000000	07/18/07 10:40:28
B_2496	0.1492	0.1691	1.0000000	07/18/07 10:52:54
Ba4934	1.8503	2.4411	1.0000000	07/18/07 10:48:54
Be3130	1.0577	0.7578	1.0000000	07/18/07 10:48:54
Bi1902	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
Cd2288	0.3977	-0.0796	1.0000000	07/18/07 10:52:54
Co2286	0.3216	0.0105	1.0000000	07/18/07 10:48:54
Cr3578	0.0171	0.0554	1.0000000	07/18/07 11:17:34
Cu3247	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
Ge2068	0.0077	0.1247	1.0000000	07/18/07 10:40:28
In2306	0.0258	0.0268	1.0000000	07/18/07 10:40:28
K_7664	0.1247	1.6435	1.0000000	07/18/07 10:44:32
Li6103	0.2255	-37.3973	1.0000000	07/18/07 11:17:34
Mg3838	0.0101	-0.0346	1.0000000	07/18/07 10:44:32
Mn2576	1.8588	0.4665	1.0000000	07/18/07 10:48:54
Mo2020	0.1124	0.0083	1.0000000	07/18/07 11:04:24
Na5889	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
Ni2316	0.2160	-0.0457	1.0000000	07/18/07 10:44:32
Os2255	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
Pt2036	-0.0007	-0.0096	-1.0000000	07/18/07 10:40:28
Pt2144	0.0141	0.0309	1.0000000	07/18/07 10:40:28
Ru2402	0.0737	0.3076	1.0000000	07/18/07 10:40:28
Sb2068	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
Si2881	0.0028	0.0997	1.0000000	07/18/07 10:40:28
Sn1899	0.0364	0.0133	1.0000000	07/18/07 11:17:34
Sr3464	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
Te2142	0.0146	-0.0299	1.0000000	07/18/07 10:40:28
Ti3361	0.0641	0.0429	1.0000000	07/18/07 11:04:24
Tl1908	0.0105	-0.0238	1.0000000	07/18/07 10:52:54
V_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

Method: SPEX

Sample Name: ICV-1

Operator:

Comment:

Run Time: 07/18/07 11:39 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	488.5	2186.	2082.	2018.	<.0000
Stddev	.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

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	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	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	2119.	2054.	2007.	2016.	2096.
Stddev	6.	4.	.	.	.
%RSD	.2678	.1840	.0102	.0161	.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

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

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	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}
Units	ppb	ppb	ppm	ppb	ppb
Avg	2043.	23.81	<.0000	<.0000	2150.
Stddev	3.	1.60	.1785	.4588	.
%RSD	.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

Method: SPEX

Sample Name: ICB-1

Operator:

Comment:

Run Time: 07/18/07 11:40 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	<.0000	15.13	<.0000	.3902	<.0000
Stddev	.6068	18.77	.7171	.4204	.1815
%RSD	61.50	124.0	20.57	107.7	116.7

#1	<.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

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

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	.2928	3.238	<.0000	2.978	.2626
Stddev	.6332	.674	1.483	.002	.0479
%RSD	216.2	20.80	199.6	.0495	18.25

#1	<.0000	3.714	<.0000	2.977	.2965
#2	.7405	2.762	.3058	2.979	.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	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

Method: SPEX Sample Name: CRI-1

Operator:

Comment:

Run Time: 07/18/07 11:45 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	19.91	36.11	1.521	20.45	<.0000
Stddev	1.02	23.89	.091	1.29	.3134
%RSD	5.146	66.18	5.973	6.287	22.50

#1	20.63	53.00	1.457	19.54	<.0000
#2	19.18	19.21	1.585	21.36	<.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	1.076	.1140	9.714	<.0000	3.251
Stddev	.281	.0810	.056	.1866	.612
%RSD	26.13	71.06	.5733	14.51	18.83

#1	1.274	.0567	9.753	<.0000	3.684
#2	.8768	.1712	9.674	<.0000	2.818

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	9.938	99.38	19.59	50.28	1.040
Stddev	.045	.14	1.82	1.82	.034
%RSD	.4545	.1380	9.310	3.622	3.262

#1	9.906	99.28	20.88	51.57	1.016
#2	9.970	99.47	18.30	48.99	1.064

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	2.123	.7530	<.0000	1.791	3.026
Stddev	.511	1.048	.0032	.048	7.584
%RSD	24.10	139.2	.0781	2.664	250.6

#1	2.484	1.494	<.0000	1.757	<.0000
#2	1.761	.0119	<.0000	1.824	8.389

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	29.45	.9358	5.007	<.0000	82.95
Stddev	.05	.0311	.587	.2985	.02
%RSD	.1690	3.328	11.72	6.784	.0216

#1	29.42	.9578	5.422	<.0000	82.96
#2	29.49	.9138	4.592	<.0000	82.93

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	5.378	<.0000	1.261	<.0000
Stddev	1.437	.039	738.7	.002	2.230
%RSD	454.2	.7226	423.6	.1275	70.71

#1	<.0000	5.350	<.0000	1.262	<.0000
#2	.6998	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}
Units	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	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	1.547	<.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	< .0000	<.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

Method: SPEX

Sample Name: ICSA-1

Operator:

Comment:

Run Time: 07/18/07 11:50 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	<.0000	449500.	367300.	<.0000	<.0000
Stddev	.0582	1100.	1035.	1.338	1.938
%RSD	.2412	.2446	.2817	4.185	.7671

#1	<.0000	448800.	366600.	< .0000	< .0000
#2	<.0000	450300.	368100.	< .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	1.185	.0006	30.06	348800.
Stddev	1.920	.041	.0205	4.52	168.
%RSD	.5337	3.422	3603.	15.03	.0482

#1	< .0000	1.214	.0150	33.26	348700.
#2	< .0000	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	< .0000	<.0000	117200.
#2	<.0000	<.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	< .0000	<.0000	<.0000	425700.
#2	19.86	< .0000	<.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	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	2317.	<.0000	4184.	1887.	<.0000
Stddev	15.	.5104	1151.	9.	1.656
%RSD	.6374	.4893	27.51	.4622	1.132

#1	2307.	<.0000	4998.	1893.	< .0000
#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}
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	<.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

Sample Name: ICSEA-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	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	<.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

Method: SPEX Sample Name: ICSAB-1 Operator:
 Comment:
 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}
Units	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	476.7	449.2	32.07	348400.
#2	<.0000	477.7	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	<.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	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

#1	2417.	1000.	6859.	2076.	<.0000
#2	2423.	1003.	4417.	2138.	<.0000

Sample Name: ICSAB-1 Run Time: 07/18/07 12:02

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	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	<.0000	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}
Units	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

#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}
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

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	491.9	2093.	2048.	2035.	<.0000
Stddev	2.3	3.	1.	13.	.4957
%RSD	.4750	.1574	.0293	.6183	.8090

#1	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

#1	1916.	2093.	2075.	< .0000	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	1.859	6.	2.	1.
%RSD	48.88	64.83	.0587	.1208	.0306

#1	< .0000	<.0000	9869.	1936.	2036.
#2	< .0000	<.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	< .0000
#2	11.05	2154.	5926.	403.9	< .0000

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}	288.158 {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

#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}
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

Method: SPEX

Sample Name: CCB-1

Operator:

Comment:

Run Time: 07/18/07 12:11 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	<.0000	17.86	<.0000	<.0000	<.0000
Stddev	.4851	8.37	2.330	.1054	.3906
%RSD	226.2	46.85	408.1	51.62	167.3

#1	<.0000	11.94	<.0000	<.0000	<.0000
#2	.1286	23.77	1.077	<.0000	.0427

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	.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
#2	<.0000	.0761	<.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	<.0000	.1123	1.537	.4925	12.52
Stddev	.1339	.1479	2.176	.8435	5.37
%RSD	227.0	131.7	141.6	171.3	42.89

#1	<.0000	.0077	3.076	<.0000	16.32
#2	.0357	.2168	<.0000	1.089	8.723

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	2.404	<.0000	<.0000	2.566	.1364
Stddev	.452	.9127	.2697	2.131	4.669
%RSD	18.82	694.6	4.572	83.06	3422.

#1	2.723	<.0000	<.0000	4.073	<.0000
#2	2.084	.5140	<.0000	1.059	3.438

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	.5599	<.0000	<.0000	.0700
Stddev	.0261	.1048	.1256	.2735	.1071
%RSD	35.92	18.72	1.776	1.555	153.0

#1	<.0000	.4858	<.0000	<.0000	<.0000
#2	<.0000	.6340	<.0000	<.0000	.1457

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	58.02	<.0000	.0659
Stddev	1.036	.3684	574.4	1.189	2.199
%RSD	345.1	30.70	989.9	6.578	3338.

#1	.4324	<.0000	464.2	<.0000	<.0000
#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}	288.158 {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	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

Method: SPEX Sample Name: CCV-2 Operator:
 Comment:
 Run Time: 07/18/07 14:03 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	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	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	1916.	2063.	2055.	.8897	2048.
Stddev	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	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	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	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	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	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	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	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	30.34	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

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

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	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
	2070.	22.68	< .0000	<.0000	2162.
	2056.	25.61	< .0000	<.0000	2172.

em	V 2924	W 2397	Zn2138	Zr3391
ne	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}
its	ppb	ppb	ppb	ppb
g	2021.	<.0000	2062.	.9862
ddev	.	10.88	2.	.0297
SD	.0116	1.178	.0920	3.014
	2021.	< .0000	2061.	.9652
	2020.	< .0000	2064.	1.007

Method: SPEX Sample Name: CCB-2 Operator:
Comment:
Run Time: 07/18/07 14:05 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	1.759	17.87	<.0000	.9484	<.0000
Stddev	.850	16.18	1.972	.2633	.4016
%RSD	48.29	90.55	115.2	27.76	859.6

#1	1.158	29.30	< .0000	1.135	.2373
#2	2.360	6.426	< .0000	.7623	<.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	.4551	.0376	.0224	.1319	.2890
Stddev	.5617	.0170	.0185	.1398	1.124
%RSD	123.4	45.15	82.96	106.0	388.9

#1	.8523	.0256	.0092	.0331	1.084
#2	.0579	.0496	.0355	.2307	< .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	<.0000	.0384	<.0000	1.442	.4005
Stddev	.0527	.0705	2.290	.199	.0784
%RSD	64.02	183.8	83.20	13.80	19.57

#1	<.0000	<.0000	< .0000	1.301	.3451
#2	<.0000	.0883	< .0000	1.583	.4559

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	1.402	.3227	<.0000	<.0000	<.0000
Stddev	1.417	.2704	1.100	1.820	1.945
%RSD	101.0	83.78	26.49	167.0	108.8

#1	2.404	.1315	< .0000	< .0000	< .0000
#2	.4005	.5139	< .0000	.1972	< .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	1.035	<.0000	<.0000	.1557
Stddev	.0303	.202	1.391	.0795	.0141
%RSD	30.57	19.50	12.09	.3846	9.083

#1	<.0000	.8920	< .0000	<.0000	.1457
#2	<.0000	1.177	< .0000	<.0000	.1657

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	.0001
Stddev	1.529	.3421	4519.	4.161	.3716
%RSD	166.9	31.97	210.2	98.99	366000.

#1	.1653	<.0000	< .0000	< .0000	<.0000
#2	< .0000	<.0000	1046.	< .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

#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	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	.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

Method: SPEX

Sample Name: MBLK,IW

Operator:

Comment:

Run Time: 07/18/07 14:47 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	<.0000	9.182	1.902	1.933	<.0000
Stddev	.9102	6.479	.807	.236	.2310
%RSD	106.1	70.56	42.43	12.23	49.09

#1	<.0000	4.601	1.331	1.766	<.0000
#2	<.0000	13.76	2.472	2.100	<.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	.1137	.2257	<.0000	3.560	3.323
Stddev	.1492	.0075	.0333	.792	.715
%RSD	131.2	3.316	521.9	22.26	21.52

#1	.2192	.2204	.0172	2.999	2.817
#2	.0082	.2310	<.0000	4.120	3.829

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	.0911	<.0000	1.267	6.172
Stddev	.0658	.0095	1.374	1.541	.125
%RSD	146.3	10.41	282.8	121.7	2.019

#1	.0016	.0844	<.0000	2.357	6.260
#2	<.0000	.0978	.4859	.1770	6.084

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	.9199	.3584	<.0000	.1457	1.925
Stddev	2.435	.1522	.0320	.4250	1.751
%RSD	264.7	42.46	1.192	291.7	90.96

#1	2.642	.4660	<.0000	.4462	3.162
#2	<.0000	.2508	<.0000	<.0000	.6868

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	.6641	25.58	20.91	.0200
Stddev	.0061	.1203	2.14	2.94	.0646
%RSD	16.54	18.11	8.350	14.05	322.9

#1	<.0000	.5790	27.09	22.99	<.0000
#2	<.0000	.7491	24.07	18.84	.0657

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	1.818
Stddev	.3768	.8420	164.2	10.10	.341
%RSD	87.29	67.04	70.51	30.82	18.75

#1	<.0000	<.0000	<.0000	<.0000	2.059
#2	<.0000	<.0000	<.0000	<.0000	1.577

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	.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	W 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: SPEX

Sample Name: LCS-W,IW

Operator:

Comment:

Run Time: 07/18/07 14:52 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	481.7	2173.	2109.	2041.	<.0000
Stddev	.0	1.	4.	3.	.3960
%RSD	.0006	.0589	.1780	.1607	2.785

#1	481.7	2172.	2106.	2039.	<.0000
#2	481.7	2174.	2112.	2043.	<.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	1907.	2029.	2068.	2.373	2067.
Stddev	6.	4.	1.	1.445	1.
%RSD	.2917	.2139	.0441	60.90	.0538

#1	1903.	2026.	2069.	1.351	2067.
#2	1911.	2032.	2068.	3.395	2068.

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	2114.	2087.	1987.	1986.	2120.
Stddev	2.	4.	4.	1.	3.
%RSD	.1110	.1819	.1839	.0295	.1289

#1	2112.	2084.	1985.	1986.	2118.
#2	2116.	2090.	1990.	1987.	2122.

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	9882.	2120.	2041.
Stddev	.1700	.7435	26.	6.	13.
%RSD	.7182	20.27	.2666	.2898	.6193

#1	<.0000	<.0000	9863.	2116.	2032.
#2	<.0000	<.0000	9900.	2125.	2050.

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	2021.	2049.	1906.	2131.	2146.
Stddev	.	47.	4.	5.	6.
%RSD	.0047	2.317	.1896	.2351	.2569

#1	2021.	2016.	1904.	2127.	2142.
#2	2021.	2083.	1909.	2134.	2149.

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	32.27	2219.	4242.	364.4	<.0000
Stddev	.31	7.	82.	47.5	39.57
%RSD	.9488	.3063	1.939	13.05	2.254

#1	32.05	2214.	4301.	398.0	< .0000
#2	32.48	2224.	4184.	330.8	< .0000

: 00098

Sample Name: LCS-W,IW Run Time: 07/18/07 14:52

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	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	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	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

#1	2077.	21.40	<.0000	<.0000	2188.
#2	2080.	27.08	<.0000	<.0000	2185.

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	2032.	<.0000	2071.	.1460
Stddev	1.	4.292	5.	.0891
%RSD	.0387	.4656	.2317	61.04

#1	2031.	< .0000	2068.	.2090
#2	2032.	< .0000	2074.	.0830

Method: SPEX Sample Name: 070622041-001A, IW Operator:
 Comment:
 Run Time: 07/18/07 14:57 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	<.0000	79.32	80.67	7.250	<.0000
Stddev	.2428	7.13	3.13	.342	.1706
%RSD	20.96	8.990	3.887	4.711	5.580

#1	<.0000	84.36	78.45	7.492	<.0000
#2	<.0000	74.28	82.89	7.009	<.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	11.18	6.880	.0346	1.187	17560.
Stddev	1.38	.003	.0130	1.352	2.
%RSD	12.32	.0360	37.58	113.9	.0118

#1	12.16	6.881	.0438	.2307	17560.
#2	10.21	6.878	.0254	2.143	17560.

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	.1800	.1727	<.0000	2.959	233.9
Stddev	.0373	.0760	.9168	1.642	1.4
%RSD	20.73	44.00	31.11	55.48	.5947

#1	.2064	.2264	<.0000	1.798	234.9
#2	.1536	.1190	<.0000	4.120	233.0

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	<.0000	<.0000	788.6	<.0000	4280.
Stddev	.1131	.0845	19.6	.1924	10.
%RSD	4.555	13.09	2.490	.3306	.2366

#1	<.0000	<.0000	802.5	<.0000	4273.
#2	<.0000	<.0000	774.7	<.0000	4287.

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	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	18.66	12.45	6976.	11610.	.0600

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	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	<.0000

Sample Name: 070622041-001A,IW Run Time: 07/18/07 14:57

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	Tl1908
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	850.2	183.2	5.645	45.50

#1	3.157	< .0000	3.518	.7971
#2	< .0000	1.467	3.811	1.553

Method: SPEX

Sample Name: 070622041-002A,IW

Operator:

Comment:

Run Time: 07/18/07 15:01 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	<.0000	71.07	69.76	2.379	<.0000
Stddev	1.032	1.94	4.04	.920	.0277
%RSD	70.74	2.726	5.788	38.66	.8382

#1	<.0000	69.70	72.62	3.030	<.0000
#2	<.0000	72.44	66.90	1.729	<.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	8.211	6.528	.0543	2.076	17430.
Stddev	.193	.020	.0259	1.958	24.
%RSD	2.355	.3046	47.79	94.28	.1362

#1	8.074	6.514	.0359	3.461	17410.
#2	8.347	6.542	.0726	.6921	17440.

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	.1055	.2158	<.0000	6.512	198.9
Stddev	.1119	.0665	1.375	.398	.5
%RSD	106.1	30.80	137.8	6.118	.2450

#1	.1847	.1688	<.0000	6.794	198.5
#2	.0264	.2629	<.0000	6.230	199.2

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	.0478	698.4	<.0000	4271.
Stddev	4.700	.0845	7.1	.5406	15.
%RSD	165.3	176.8	1.023	.8478	.3569

#1	.4797	<.0000	703.4	<.0000	4260.
#2	<.0000	.1075	693.3	<.0000	4282.

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	15.68	2.656	7295.	11980.	.2257
Stddev	.00	.524	48.	17.	.0687
%RSD	.0298	19.72	.6594	.1419	30.43

#1	15.69	3.027	7261.	11990.	.2742
#2	15.68	2.286	7329.	11970.	.1771

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	.7328	<.0000	<.0000	<.0000	.4598
Stddev	.0004	.3684	82.07	2.971	2.075
%RSD	.0546	69.48	3.441	18.60	451.3

#1	.7331	<.0000	<.0000	<.0000	1.927
#2	.7325	<.0000	<.0000	<.0000	<.0000

Sample Name: 070622041-002A,IW Run Time: 07/18/07 15:01

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	.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	4701.	.3473

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	63.08	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

Method: SPEX

Sample Name: CCV-3

Operator:

Comment:

Run Time: 07/18/07 15:12 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	484.0	2175.	2148.	2083.	<.0000
Stddev	1.8	.	10.	4.	.1321
%RSD	.3770	.0187	.4765	.1926	.9607

#1	485.3	2175.	2156.	2080.	<.0000
#2	482.7	2175.	2141.	2085.	<.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	1924.	2003.	2093.	1.186	2116.
Stddev	1.	5.	1.	.047	.
%RSD	.0394	.2685	.0544	3.932	.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	<.0000	10110.	2291.	2073.
#2	<.0000	<.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	5.288	3.970

#1	30.55	2204.	2672.	389.6	<.0000
#2	30.42	2195.	2440.	419.9	<.0000

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

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.	<.0000	2096.	1.931
#2	2033.	<.0000	2092.	.9232

Method: SPEX

Sample Name: CCB-3

Operator:

Comment:

Run Time: 07/18/07 15:15 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	.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	< .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 { 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	< .0000	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.	< .0000	.8323
#2	<.0000	<.0000	3253.	< .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	< .0000	.5506
#2	.4476	6.979	.6554	< .0000	.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

Method: SPEX

Sample Name: 070622041-003A,IW

Operator:

Comment:

Run Time: 07/18/07 15:19 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	.5160	65.13	65.20	7.436	<.0000
Stddev	2.125	10.34	4.21	.447	.3190
%RSD	411.9	15.88	6.454	6.016	7.953

#1	2.019	57.82	62.22	7.752	<.0000
#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	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	.1567	.1381	<.0000	5.633	206.8
Stddev	.1053	.0461	.6877	1.143	.7
%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}
Units	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}
Units	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	.6326	<.0000	<.0000	<.0000	<.0000
#2	2.730	<.0000	<.0000	<.0000	1.708

Sample Name: 070622041-003A,IW Run Time: 07/18/07 15:19

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	.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	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	63.22	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	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	1.546	.7551
Stddev	.9573	.4753	.080	.4754
%RSD	106.0	42.62	5.197	62.95

#1	<.0000	<.0000	1.603	.4190
#2	<.0000	<.0000	1.490	1.091

Method: SPEX Sample Name: 070622041-004A,IW Operator:
Comment:
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	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	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.	.4685
#2	18.09	1.765	7610.	11040.	.2228

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	2.030	<.0000	< .0000	< .0000	< .0000
#2	.9317	<.0000	< .0000	< .0000	1.270

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	.1256	4.164	.2186	4741.	.5760
Stddev	.0532	1.559	.1235	19.	.3953
%RSD	42.34	37.44	56.52	.4008	68.63

#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	8.211	.1481	.2816	2.200

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	1.465	<.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: SPEX Sample Name: 070622041-005A,IW Operator:
Comment:
Run Time: 07/18/07 15:29 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	<.0000	73.88	66.29	2.993	<.0000
Stddev	.0000	16.25	3.03	1.419	.5167
%RSD	.0049	21.99	4.574	47.40	14.45

#1	<.0000	62.39	68.44	3.996	<.0000
#2	<.0000	85.37	64.15	1.990	<.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	12.20	7.031	.3600	1.253	17720.
Stddev	.08	.028	.0763	2.005	7.
%RSD	.6575	.3933	21.20	160.1	.0390

#1	12.14	7.011	.3061	< .0000	17730.
#2	12.26	7.050	.4140	2.670	17720.

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	.1640	<.0000	8.592	220.8
Stddev	.0680	.1234	.1141	1.447	1.2
%RSD	273.9	75.24	15.08	16.84	.5415

#1	<.0000	.2513	<.0000	7.569	219.9
#2	.0233	.0768	<.0000	9.615	221.6

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	.1314	629.8	<.0000	4464.
Stddev	1.361	1.555	5.0	.0990	.
%RSD	73.86	1183.	.7969	.1902	.0085

#1	< .0000	1.231	633.3	<.0000	4464.
#2	< .0000	< .0000	626.2	<.0000	4464.

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	24.68	1.251	8064.	11010.	.4271
Stddev	.09	.019	15.	92.	.2687
%RSD	.3537	1.541	.1915	.8386	62.91

#1	24.62	1.265	8053.	10940.	.2371
#2	24.74	1.238	8075.	11070.	.6171

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	.9320	<.0000	56.10	<.0000	1.205
Stddev	1.508	.5000	1891.	17.24	1.765
%RSD	161.8	26.74	3371.	48.82	146.5

#1	1.998	<.0000	< .0000	< .0000	2.453
#2	< .0000	<.0000	1393.	< .0000	< .0000

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	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	65.54	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

Method: SPEX Sample Name: 070622041-006A, IW Operator:
 Comment:
 Run Time: 07/18/07 15:32 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	.3014	108.2	99.84	2.045	<.0000
Stddev	.8502	16.8	.10	1.761	.1490
%RSD	282.1	15.54	.1031	86.10	4.581

#1	<.0000	120.1	99.77	3.290	<.0000
#2	.9027	96.33	99.92	.8000	<.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	6.387	7.451	<.0000	<.0000	16900.
Stddev	.070	.175	.0464	.0464	131.
%RSD	1.088	2.348	1019.	182000.	.7770

#1	6.436	7.327	<.0000	.0328	16800.
#2	6.338	7.575	.0283	<.0000	16990.

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	.1381	.1631	<.0000	2.714	251.2
Stddev	.0132	.0570	1.833	1.494	2.7
%RSD	9.536	34.93	56.00	55.04	1.078

#1	.1474	.2034	<.0000	1.658	249.2
#2	.1288	.1228	<.0000	3.770	253.1

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	.8844	575.3	<.0000	4330.
Stddev	.1687	.9635	6.7	.5516	33.
%RSD	4.254	108.9	1.158	.8393	.7590

#1	<.0000	.2031	570.6	<.0000	4307.
#2	<.0000	1.566	580.0	<.0000	4354.

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	26.28	.4995	9752.	11610.	.3714
Stddev	.22	.2135	135.	158.	.1657
%RSD	.8226	42.75	1.384	1.365	44.60

#1	26.13	.3485	9656.	11500.	.2542
#2	26.43	.6505	9847.	11720.	.4885

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	4.210	<.0000	<.0000	<.0000	<.0000
Stddev	.260	1.329	1315.	6.539	.3095
%RSD	6.173	132.3	161.2	40.94	64.24

#1	4.394	<.0000	<.0000	<.0000	<.0000
#2	4.027	<.0000	114.0	<.0000	<.0000

Sample Name: 070622041-006A,IW Run Time: 07/18/07 15:32

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	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	Tl1908
Line	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
Units	ppb	ppb	ppm	ppb	ppb
Avg	59.85	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

#1	58.86	2.534	1.461	.9306	2.552
#2	60.84	.2126	2.181	1.104	1.496

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	1.465	<.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

Comment:

Run Time: 07/18/07 15:38 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	.4729	127.0	126.8	1.617	<.0000
Stddev	1.578	4.6	.9	.525	.1098
%RSD	333.7	3.659	.6840	32.49	3.155

#1	< .0000	130.3	127.4	1.989	<.0000
#2	1.589	123.7	126.1	1.246	<.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	6.275	8.533	<.0000	<.0000	17220.
Stddev	.334	.106	.0189	.6992	18.
%RSD	5.319	1.239	70.52	66.28	.1049

#1	6.039	8.458	<.0000	<.0000	17210.
#2	6.511	8.608	<.0000	<.0000	17240.

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	.0590	.0796	<.0000	11.90	256.2
Stddev	.0022	.0909	1.260	.64	.5
%RSD	3.710	114.2	100.9	5.373	.1895

#1	.0574	.1439	< .0000	11.45	255.8
#2	.0605	.0154	< .0000	12.35	256.5

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	.0717	661.4	<.0000	4399.
Stddev	2.208	.4562	2.7	2.111	8.
%RSD	1101.	636.4	.4070	3.252	.1839

#1	1.361	.3943	659.5	< .0000	4393.
#2	< .0000	<.0000	663.3	< .0000	4405.

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	28.25	.5434	9741.	11570.	.1400
Stddev	.09	.0505	22.	70.	.1899
%RSD	.3323	9.289	.2220	.6024	135.6

#1	28.31	.5077	9725.	11520.	.0057
#2	28.18	.5791	9756.	11620.	.2742

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	4.194	<.0000	<.0000	<.0000	.9637
Stddev	.801	.6842	412.3	7.133	.6194
%RSD	19.09	26.17	233.0	26.94	64.27

#1	4.760	<.0000	< .0000	< .0000	1.402
#2	3.628	<.0000	114.6	< .0000	.5257

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

Method: SPEX Sample Name: 070622041-007ADP,IW Operator:
 Comment:
 Run Time: 07/18/07 15:42 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	<.0000	131.6	126.3	1.710	<.0000
Stddev	1.396	4.6	2.2	.499	.3962
%RSD	101.7	3.479	1.758	29.21	10.44

#1	< .0000	134.8	124.8	2.063	<.0000
#2	< .0000	128.3	127.9	1.357	<.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	5.927	8.514	<.0000	<.0000	17210.
Stddev	.211	.287	.0629	.7459	14.
%RSD	3.553	3.367	157.2	133.1	.0788

#1	6.076	8.312	<.0000	<.0000	17200.
#2	5.778	8.717	.0045	<.0000	17220.

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	.0109	.1688	.2099	10.63	255.6
Stddev	.1405	.0407	1.948	.54	.5
%RSD	1293.	24.11	927.9	5.126	.2034

#1	<.0000	.1976	< .0000	10.24	255.9
#2	.1102	.1401	1.587	11.02	255.2

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	657.8	<.0000	4381.
Stddev	.3398	.7267	.5	1.631	6.
%RSD	13.68	98.08	.0715	2.453	.1433

#1	<.0000	<.0000	657.5	< .0000	4376.
#2	<.0000	<.0000	658.2	< .0000	4385.

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	28.17	.4281	9880.	11520.	.3428
Stddev	.03	.0194	64.	28.	.1252
%RSD	.0888	4.534	.6525	.2443	36.53

#1	28.19	.4418	9834.	11500.	.2542
#2	28.15	.4144	9926.	11540.	.4314

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	4.294	<.0000	<.0000	<.0000	.8103
Stddev	.518	.1184	329.3	19.61	.5885
%RSD	12.06	4.389	278.6	70.71	72.63

#1	4.660	<.0000	< .0000	< .0000	.3942
#2	3.928	<.0000	114.7	< .0000	1.226

Sample Name: 070622041-007ADP,IW Run Time: 07/18/07 15:42

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	1.347	<.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

Method: SPEX Sample Name: 070622041-007AMS,IW Operator:
 Comment:
 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.	2211.	44.48	<.0000
#2	46.06	2235.	2205.	45.60	<.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 { 87}
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	<.0000	85.31	<.0000

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

#1	525.6	<.0000	545.9	.6712
#2	531.7	<.0000	550.1	.8812

Method: SPEX Sample Name: 070622041-007AA, IW Operator:
 Comment:
 Run Time: 07/18/07 15:51 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	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}	383.826 { 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

#1	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

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	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	Tl1908
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	W 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

Method: SPEX Sample Name: 070622041-007AL,IW Operator:
 Comment:
 Run Time: 07/18/07 15:56 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	<.0000	72.00	41.29	1.877	<.0000
Stddev	.4250	17.49	1.26	.263	.2531
%RSD	33.02	24.29	3.041	14.01	58.61

#1	<.0000	59.63	40.40	1.691	<.0000
#2	<.0000	84.36	42.18	2.063	<.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	1.051	2.134	.0294	.2306	3984.
Stddev	.263	.059	.0278	1.678	4.
%RSD	25.06	2.781	94.58	727.7	.0925

#1	.8644	2.092	.0491	< .0000	3986.
#2	1.237	2.176	.0097	1.417	3981.

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	.1397	.1928	<.0000	2.994	58.81
Stddev	.1295	.0583	.9167	.896	.04
%RSD	92.71	30.25	35.28	29.91	.0697

#1	.2312	.2341	<.0000	2.361	58.84
#2	.0481	.1516	<.0000	3.628	58.78

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	1.864	128.1	<.0000	1078.
Stddev	1.302	.152	1.0	.1828	6.
%RSD	61.35	8.159	.8096	.8881	.5778

#1	< .0000	1.972	127.4	<.0000	1073.
#2	< .0000	1.757	128.9	<.0000	1082.

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	6.409	.1729	2301.	2389.	.2100
Stddev	.089	.1242	2.	2.	.0424
%RSD	1.390	71.83	.1076	.0715	20.20

#1	6.472	.2607	2299.	2391.	.2400
#2	6.346	.0851	2303.	2388.	.1800

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	1.215	<.0000	<.0000	<.0000	<.0000
Stddev	.589	.2237	1398.	4.160	2.385
%RSD	48.43	10.83	77.48	16.50	403.3

#1	1.632	<.0000	< .000	< .0000	< .0000
#2	.7992	<.0000	< .000	< .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	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	.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

Method: SPEX

Sample Name: CCV-4

Operator:

Comment:

Run Time: 07/18/07 16:00 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	493.1	2156.	2069.	2021.	<.0000
Stddev	1.8	6.	6.	12.	1.001
%RSD	.3730	.2665	.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	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	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	< .0000	<.0000	9736.	1991.	2038.
#2	< .0000	<.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

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

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	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.	< .0000	2054.	.6711
#2	2029.	< .0000	2067.	1.763

Method: SPEX

Sample Name: CCB-4

Operator:

Comment:

Run Time: 07/18/07 16:06 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	.3864	29.79	<.0000	.6506	<.0000
Stddev	.2424	.61	1.883	.6302	.2749
%RSD	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

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	.5543	.0446	<.0000	.5604	1.589
Stddev	.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	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	.3108	<.0000	1.981	<.0000
Stddev	3.683	.5240	.9721	.508	2.141
%RSD	1841.	168.6	22.11	25.63	64.84

#1	<.0000	<.0000	<.0000	1.622	<.0000
#2	2.404	.6813	<.0000	2.340	<.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	4.119	8.852	<.0000	.0671
Stddev	.0134	1.016	.072	.0409	.1757
%RSD	27.65	24.67	.8148	.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	ppB	ppb	ppb	ppb	ppb
Avg	.3662	<.0000	<.0000	<.0000	.6572
Stddev	.6103	.4209	2218.	14.86	.4960
%RSD	166.7	17.07	103.1	98.20	75.47

#1	<.0000	<.0000	<.000	<.0000	.3065
#2	.7978	<.0000	<.000	<.0000	1.008

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	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

Method: SPEX

Sample Name: CCV-5

Operator:

Comment:

Run Time: 07/18/07 17:14 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	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}
Units	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.	< .0000	2044.
#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}
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	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	9855.	2029.	2048.
Stddev	2.888	1.301	23.	15.	5.
%RSD	10.91	92.28	.2347	.7386	.2338

#1	< .0000	< .0000	9872.	2039.	2044.
#2	< .0000	< .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}
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	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	31.97	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

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	<.0000	<.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.	<.0000	2080.	1.805
#2	2033.	<.0000	2068.	2.141

Method: SPEX Sample Name: CCB-5 Operator:
 Comment:
 Run Time: 07/18/07 17:23 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	<.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

#1	.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}
Units	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	<.0000	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	Ni2316
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	<.0000	2.146
#2	.4031	<.0000	<.0000	<.0000	<.0000

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

Method: SPEX

Sample Name: CCV-6

Operator:

Comment:

Run Time: 07/18/07 18:10 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	488.9	2146.	2074.	2004.	<.0000
Stddev	.3	15.	4.	7.	.5887
%RSD	.0701	.6896	.1902	.3716	4.359

#1	489.2	2157.	2077.	1999.	<.0000
#2	488.7	2136.	2072.	2009.	<.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	1906.	2051.	2037.	<.0000	2019.
Stddev	6.	7.	2.	1.165	3.
%RSD	.3189	.3523	.1223	104.0	.1563

#1	1902.	2046.	2036.	<.0000	2017.
#2	1910.	2057.	2039.	<.0000	2021.

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	2111.	2042.	1997.	2011.	2082.
Stddev	4.	6.	4.	5.	4.
%RSD	.2000	.2894	.1850	.2345	.1807

#1	2108.	2038.	1999.	2008.	2080.
#2	2114.	2046.	1994.	2015.	2085.

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	9716.	2016.	2026.
Stddev	2.888	.4393	10.	4.	.
%RSD	13.79	13.77	.1008	.1977	.0236

#1	<.0000	<.0000	9709.	2019.	2026.
#2	<.0000	<.0000	9723.	2014.	2026.

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	2001.	2024.	1824.	1847.	2094.
Stddev	3.	47.	1.	2.	6.
%RSD	.1259	2.313	.0362	.1098	.2955

#1	2000.	1991.	1825.	1849.	2090.
#2	2003.	2058.	1824.	1846.	2098.

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	31.02	2059.	2963.	390.0	<.0000
Stddev	.47	5.	1233.	17.2	35.49
%RSD	1.517	.2592	41.62	4.420	1.941

#1	31.35	2055.	3835.	377.8	<.0000
#2	30.69	2063.	2091.	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	Tl1908
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	1994.	<.0000	2039.	2.183
#2	2003.	<.0000	2047.	.0409

Method: SPEX Sample Name: CCB-6

Operator:

Comment:

Run Time: 07/18/07 18:14 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	<.0000	9.654	<.0000	<.0000	<.0000
Stddev	.4855	17.49	1.703	.7098	.2530
%RSD	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}
Units	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	<.0000	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	.7148
#2	.1195	<.0000	<.0000	.1073	.7750

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	.2028	<.0000	26.92	7.151
Stddev	2.830	.7773	.0464	.64	1.751
%RSD	234.8	383.2	.8375	2.361	24.49

#1	<.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	1.248
Stddev	.7760	.2236	2877.	8.913	.836
%RSD	316.1	10.83	380.4	25.25	67.03

#1	.3032	<.0000	1278.	<.0000	1.839
#2	<.0000	<.0000	<.0000	<.0000	.6563

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}	288.158 {116}	189.989 {176}
Units	ppb	ppb	ppb	ppb	ppb
Avg	<.0000	2.774	<.0000	14.86	.3386
Stddev	.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

Method: SPEX Sample Name: CRI-2

Operator:

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}
Units	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	8.664	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	<.0000	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	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	18.50

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	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

Method: SPEX

Sample Name: ICSA-2

Operator:

Comment:

Run Time: 07/18/07 18:22 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	<.0000	376400.	360400.	<.0000	<.0000
Stddev	.0575	952.	2724.	.6245	4.327
%RSD	.0949	.2530	.7560	3.748	.7361

#1	<.0000	377100.	362300.	<.0000	<.0000
#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
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	<.0000	<.0000	397000.
Stddev	3.795	.1018	.1575	6.985	70.
%RSD	557.4	.3150	.8071	1.692	.0177

#1	<.0000	<.0000	<.0000	<.0000	397000.
#2	3.364	<.0000	<.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.	<.0000
#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}
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}
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

Method: SPEX

Sample Name: ICSAB-2

Operator:

Comment:

Run Time: 07/18/07 18:26 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	929.8	419200.	377600.	<.0000	<.0000
Stddev	5.8	2042.	531.	8.570	.1204
%RSD	.6190	.4873	.1407	22.95	.0194

#1	925.8	417700.	378000.	< .0000	<.0000
#2	933.9	420600.	377200.	< .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	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	< .0000	490.1	458.3	29.70	350200.
#2	< .0000	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}
Units	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.	< .0000
#2	1055.	1030.	4301.	2209.	< .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}
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	Tl1908
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	<.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	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	

Method: SPEX

Sample Name: CCV-7

Operator:

Comment:

Run Time: 07/18/07 18:30 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	487.7	2117.	2077.	2001.	<.0000
Stddev	1.8	15.	5.	7.	.0771
%RSD	.3646	.7302	.2195	.3608	.5867

#1	488.9	2107.	2081.	1996.	<.0000
#2	486.4	2128.	2074.	2006.	<.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	1905.	2044.	2029.	<.0000	2017.
Stddev	5.	5.	.	1.678	6.
%RSD	.2476	.2324	.0211	145.4	.2823

#1	1902.	2047.	2029.	.0327	2021.
#2	1908.	2040.	2029.	<.0000	2013.

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	2106.	2044.	1996.	2010.	2079.
Stddev	4.	4.	1.	2.	5.
%RSD	.2123	.1845	.0366	.1199	.2384

#1	2102.	2041.	1996.	2012.	2076.
#2	2109.	2046.	1997.	2008.	2083.

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	9678.	2006.	2019.
Stddev	1.812	.7436	5.	2.	1.
%RSD	7.026	27.41	.0523	.1000	.0710

#1	<.0000	<.0000	9675.	2005.	2020.
#2	<.0000	<.0000	9682.	2008.	2018.

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	2004.	2029.	1817.	1836.	2091.
Stddev	2.	36.	1.	4.	5.
%RSD	.0829	1.759	.0557	.2004	.2273

#1	2003.	2003.	1817.	1833.	2088.
#2	2005.	2054.	1818.	1838.	2095.

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	31.30	2142.	2091.	373.2	<.0000
Stddev	.35	2.	3289.	30.3	66.45
%RSD	1.127	.0745	157.3	8.123	3.474

#1	31.55	2141.	4417.	351.8	<.0000
#2	31.05	2143.	<.0000	394.6	<.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	<.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

Method: SPEX

Sample Name: CCB-7

Operator:

Comment:

Run Time: 07/18/07 18:33 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	<.0000	13.74	<.0000	.5575	<.0000
Stddev	.5460	2.59	.4482	.0259	.0771
%RSD	318.4	18.87	18.61	4.646	13.67

#1	.2146	11.91	<.0000	.5392	<.0000
#2	<.0000	15.58	<.0000	.5758	<.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	.2440	.0368	<.0000	<.0000	3.756
Stddev	.1054	.0583	.0278	1.212	1.532
%RSD	43.18	158.3	36.64	89.67	40.79

#1	.3185	<.0000	<.0000	<.0000	4.840
#2	.1695	.0780	<.0000	<.0000	2.673

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	.0950	<.0000	.8443	.3165
Stddev	.0088	.0448	3.206	.0495	.0315
%RSD	16.14	47.15	123.8	5.869	9.946

#1	<.0000	.1266	<.0000	.8793	.2943
#2	<.0000	.0633	<.0000	.8093	.3388

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	.1673	<.0000	7.761	2.750
Stddev	2.719	.2535	1.367	.099	2.917
%RSD	154.3	151.5	21.18	1.280	106.1

#1	.1602	<.0000	<.0000	7.691	.6874
#2	<.0000	.3465	<.0000	7.831	4.813

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	.2360	<.0000	<.0000	<.0000
Stddev	.0035	.0194	.3062	.2058	.1293
%RSD	3.177	8.216	10.40	1.029	4547.

#1	<.0000	.2223	<.0000	<.0000	<.0000
#2	<.0000	.2497	<.0000	<.0000	.0886

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	.2847
Stddev	.2344	.0657	82.24	23.18	.5887
%RSD	14.38	2.293	141.0	689.2	206.8

#1	<.0000	<.0000	<.0000	<.0000	.7009
#2	<.0000	<.0000	<.0000	13.03	<.0000

14/07
K14

Analysis Report

Sample Name: CCB-7 Run Time: 07/18/07 18:33

	Ru2402	Sb2068	Se1960	Si2881	Sn1899
em	240.272 {140}	206.833 {162}	196.090 {171}	288.158 {116}	189.989 {176}
ne	ppb	ppb	ppb	ppb	ppb
its	.5523	<.0000	.0655	<.0000	11.87
g	.2069	1.039	.7110	2.101	.04
dddev	37.46	332.0	1086.	141.8	.2970
SD					
	.4060	.4218	.5682	<.0000	11.85
	.6986	<.0000	<.0000	.0045	11.90
1					
2					
	Sr3464	Ta2400	Te2142	Ti3361	Tl1908
lem	346.446 { 97}	240.063 {140}	214.281 {157}	336.121 {100}	190.864 {176}
ine	ppb	ppb	ppm	ppb	ppb
units	5.390	4.152	3.134	<.0000	<.0000
avg	1.723	4.014	1.707	.6419	2.281
stddev	31.97	96.68	54.47	247.6	129.6
%RSD					
	6.608	6.990	1.927	<.0000	<.0000
	4.171	1.313	4.340	.1946	<.0000
#1					
#2					
	V 2924	W 2397	Zn2138	Zr3391	
Elem	292.402 {115}	239.709 {140}	213.856 {157}	339.198 { 99}	
Line	ppb	ppb	ppb	ppb	
Units	1.916	<.0000	<.0000	<.0000	
Avg	.159	.2783	.0207	.5936	
Stddev	8.323	14.95	2.960	50.50	
%RSD					
	1.803	<.0000	<.0000	<.0000	
	2.028	<.0000	<.0000	<.0000	
#1					
#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

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0002	0.0006	0.0002	11:23:00	No
2			0.0001	0.0003	0.0001	11:23:29	No
Mean:			0.0001				
SD :			0.0001				
%RSD:			48.0724				

Auto-zero performed.

Element: Hg Seq. No.: 2 AS Loc.: 2 Date: 06/27/2007
 Sample ID: 0.5 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0087	0.0397	0.0088	11:24:42	No
2			0.0087	0.0391	0.0088	11:25:11	No
Mean:			0.0087				
SD :			0.0000				
%RSD:			0.3116				

[Hg] Standard number 1 applied. [0.5000]
 Correlation Coefficient: 1.00000 Slope: 0.01737

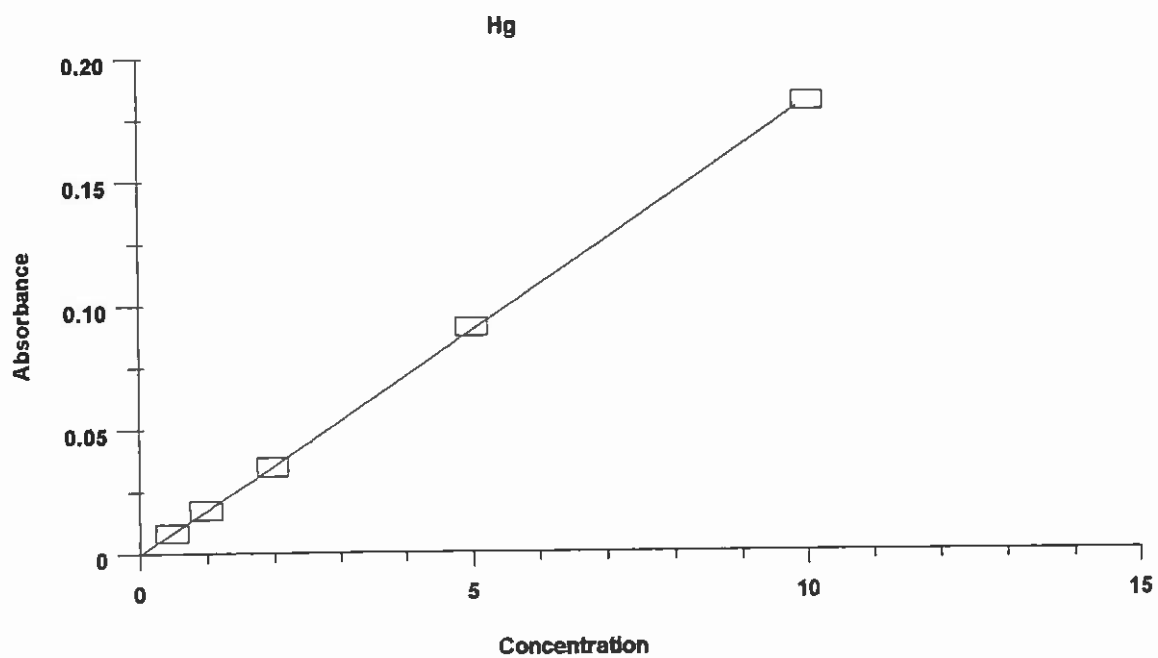
Element: Hg Seq. No.: 3 AS Loc.: 3 Date: 06/27/2007
 Sample ID: 1.00 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0177	0.0785	0.0179	11:26:24	No
2			0.0181	0.0810	0.0182	11:26:53	No
Mean:			0.0179				
SD :			0.0002				
%RSD:			1.3943				

[Hg] Standard number 2 applied. [1.000]
 Correlation Coefficient: 1.00000 Slope: 0.01687

Element: Hg Seq. No.: 4 AS Loc.: 4 Date: 06/27/2007
 Sample ID: 2.00 ppb

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1			0.0353	0.1569	0.0354	11:28:07	No
2			0.0353	0.1566	0.0354	11:28:36	No
Mean:			0.0353				
SD :			0.0000				



Seq. No.	1	AS Loc:	1	Date:	6/27/07			
Sample ID:	Calib Blank							
Elem	SampleConc	StdConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
Hg			0.0002	0.0006	62.5477	0.0002	4.1698	11:23:00
			0.0001	0.0003	62.5445	0.0001	4.1696	11:23:29
Auto-zero performed.								
Mean:			0.0001					
SD:			0.00006					
%RSD:			48.07					
Seq. No.	2	AS Loc:	2	Date:	6/27/07			
Sample ID:	0.5 ppb							
Elem	SampleConc	StdConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
Hg			0.0087	0.0397	62.5452	0.0088	4.1697	11:24:42
			0.0087	0.0391	62.5431	0.0088	4.1695	11:25:11
[Hg] Standard number 1 applied. [0.5000]								
Correlation Coefficient: 1.00000			Slope: 0.01737					
Mean:			0.0087					
SD:			0.00003					
%RSD:			0.31					
Seq. No.	3	AS Loc:	3	Date:	6/27/07			
Sample ID:	1.00 ppb							
Elem	SampleConc	StdConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
Hg			0.0177	0.0785	62.5420	0.0179	4.1695	11:26:24
			0.0181	0.0810	62.5431	0.0182	4.1695	11:26:53
[Hg] Standard number 2 applied. [1.000]								
Correlation Coefficient: 1.00000			Slope: 0.01687					
Mean:			0.0179					
SD:			0.00025					
%RSD:			1.39					
Seq. No.	4	AS Loc:	4	Date:	6/27/07			
Sample ID:	2.00 ppb							
Elem	SampleConc	StdConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
Hg			0.0353	0.1569	62.5420	0.0354	4.1695	11:28:07
			0.0353	0.1566	62.5442	0.0354	4.1696	11:28:36
S-shaped calibration curve detected. Two-coefficient equation used.								
[Hg] Standard number 3 applied. [2.000]								
Correlation Coefficient: 0.99983			Slope: 0.01750					
Mean:			0.0353					
SD:			0.00001					
%RSD:			0.02					
Seq. No.	5	AS Loc:	5	Date:	6/27/07			
Sample ID:	5.00 ppb							
Elem	SampleConc	StdConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
Hg			0.0912	0.4036	62.5422	0.0913	4.1695	11:29:52
			0.0914	0.4025	62.5408	0.0915	4.1694	11:30:21
[Hg] Standard number 4 applied. [5.000]								
Correlation Coefficient: 0.99998			Slope: 0.01747					
Mean:			0.0913					
SD:			0.00012					
%RSD:			0.13					

Seq. No.	6	AS Loc:	6	Date:	6/27/07			
Sample ID:	10.0 ppb							
Elem	SampleConc	StdConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
Hg			0.1825	0.8099	62.5422	0.1826	4.1695	11:31:38
			0.1817	0.8069	62.5354	0.1818	4.1690	11:32:07
[Hg] Standard number 5 applied. [10.00]								
Correlation Coefficient: 0.99991			Slope: 0.01762					
Mean:			0.1821					
SD:			0.00058					
%RSD:			0.32					
Seq. No.	7	AS Loc:	4	Date:	6/27/07			
Sample ID:	QC Sample 1							
Elem	SampleConc	StdConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
Hg	2.009µg/L	2.009µg/L	0.0357	0.1588	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	11:33:56
QC value within 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			
Sample ID:	QC Sample 2							
Elem	SampleConc	StdConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
Hg	0.0072µg/L	0.0072µg/L	0.0001	0.0015	62.5465	0.0003	4.1698	11:35:08
	0.0068µg/L	0.0068µg/L	0.0001	0.0008	62.5463	0.0002	4.1697	11:35:37
QC value within specified limits.								
Mean:	0.0070µg/L	0.0070µg/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			
Sample ID:	0.2 PPB							
Elem	SampleConc	StdConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
Hg	0.1899µg/L	0.1899µg/L	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					
Seq. No.	10	AS Loc:	10	Date:	6/27/07			
Sample ID:	2.0 PPB							
Elem	SampleConc	StdConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
Hg	1.957µg/L	1.957µg/L	0.0348	0.1551	62.5511	0.0349	4.1701	11:38:29
	1.976µg/L	1.976µg/L	0.0351	0.1563	62.5499	0.0352	4.1700	11:38:58
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:	6/27/07			
Sample ID:	MB-S							
Elem	SampleConc	StdConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
Hg	0.0213µg/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

Mean: 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	Date:	6/27/07			
Sample ID:	LCS- 0.2/500							
Elem	SampleConc	StdConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
Hg	2.956µg/L	2.956µg/L	0.0527	0.2319	62.5568	0.0528	4.1704	11:41:53
	2.936µg/L	2.936µg/L	0.0523					
Mean:	2.946µg/L	2.946µg/L	0.0525	0.2298	62.5556	0.0525	4.1704	11:42:22
SD:	0.0137µg/L	0.0137µg/L	0.00025					
%RSD:	0.46		0.47					

Seq. No.	13	AS Loc:	13	Date:	6/27/07			
Sample ID:	070626046-001A 0.2/100							
Elem	SampleConc	StdConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
Hg	0.1662µg/L	0.1662µg/L	0.0029	0.0133	62.5588	0.0031	4.1706	11:43:36
	0.1760µg/L	0.1760µg/L	0.0031	0.0141	62.5591	0.0032	4.1706	11:44:05
Mean:	0.1711µg/L	0.1711µg/L	0.0030					
SD:	0.0070µg/L	0.0070µg/L	0.00012					
%RSD:	4.06		4.07					

Seq. No.	14	AS Loc:	14	Date:	6/27/07			
Sample ID:	070626046-001A DP 0.2/100							
Elem	SampleConc	StdConc	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	0.0030	4.1708	11:45:21
	0.1709µg/L	0.1709µg/L	0.0030	0.0140	62.5623	0.0031	4.1708	11:45:50
Mean:	0.1667µg/L	0.1667µg/L	0.0029					
SD:	0.0058µg/L	0.0058µg/L	0.00010					
%RSD:	3.50		3.51					

Seq. No.	15	AS Loc:	15	Date:	6/27/07			
Sample ID:	070626046-001A MS 0.2/100							
Elem	SampleConc	StdConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
Hg	2.185µg/L	2.185µg/L	0.0388					
	2.200µg/L	2.200µg/L	0.0391	0.1694	62.5651	0.0390	4.1710	11:47:06
Mean:	2.192µg/L	2.192µg/L	0.0390	0.1702	62.5646	0.0392	4.1710	11:47:35
SD:	0.0102µg/L	0.0102µg/L	0.00018					
%RSD:	0.46		0.47					

Seq. No.	16	AS Loc:	16	Date:	6/27/07			
Sample ID:	070626046-002A 0.2/100							
Elem	SampleConc	StdConc	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	11:48:52
	0.1014µg/L	0.1014µg/L	0.0018					
Mean:	0.0977µg/L	0.0977µg/L	0.0017	0.0086	62.5683	0.0019	4.1712	11:49:21
SD:	0.0052µg/L	0.0052µg/L	0.00009					
%RSD:	5.32		5.32					

Seq. No.	17	AS Loc:	17	Date:	6/27/07			
Sample ID:	070626046-003A 0.2/100							
Elem	SampleConc	StdConc	Blank Corr Signal	Pk Area	BG Area	Pk Ht	BG Ht	Time
Hg	0.0981µg/L	0.0981µg/L	0.0017	0.0081	62.5672	0.0019	4.1711	11:50:35
	0.0974µg/L	0.0974µg/L	0.0017	0.0076	62.5680	0.0018	4.1712	11:51:04

Element: Hg Seq. No.: 15 AS Loc.: 15 Date: 06/27/2007
Sample ID: 070626046-001A MS 0.2/100

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	2.185	2.185	0.0388	0.1694	0.0390	11:47:06	No
2	2.200	2.200	0.0391	0.1702	0.0392	11:47:35	No
Mean:	2.192	2.192	0.0390				
SD :	0.01016	0.01016	0.0002				
%RSD:	0.5	0.5	0.4675				

Element: Hg Seq. No.: 16 AS Loc.: 16 Date: 06/27/2007
Sample ID: 070626046-002A 0.2/100

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0940	0.0940	0.0017	0.0078	0.0018	11:48:52	No
2	0.1014	0.1014	0.0018	0.0086	0.0019	11:49:21	No
Mean:	0.0977	0.0977	0.0017				
SD :	0.00520	0.00520	0.0001				
%RSD:	5.3	5.3	5.3214				

Element: Hg Seq. No.: 17 AS Loc.: 17 Date: 06/27/2007
Sample ID: 070626046-003A 0.2/100

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0981	0.0981	0.0017	0.0081	0.0019	11:50:35	No
2	0.0974	0.0974	0.0017	0.0076	0.0018	11:51:04	No
Mean:	0.0977	0.0977	0.0017				
SD :	0.00050	0.00050	0.0000				
%RSD:	0.5	0.5	0.5158				

Element: Hg Seq. No.: 18 AS Loc.: 18 Date: 06/27/2007
Sample ID: 070627002-001A 0.2/100

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0835	0.0835	0.0015	0.0081	0.0016	11:52:14	No
2	0.0896	0.0896	0.0016	0.0074	0.0017	11:52:43	No
Mean:	0.0865	0.0865	0.0015				
SD :	0.00437	0.00437	0.0001				
%RSD:	5.0	5.0	5.0463				

Element: Hg Seq. No.: 19 AS Loc.: 4 Date: 06/27/2007
Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.987	1.987	0.0353	0.1558	0.0354	11:54:02	No
2	2.016	2.016	0.0358	0.1578	0.0359	11:54:32	No
Mean:	2.001	2.001	0.0355				
SD :	0.02011	0.02011	0.0004				
%RSD:	1.0	1.0	1.0126				

QC value within specified limits.

Element: Hg Seq. No.: 20 AS Loc.: 1 Date: 06/27/2007
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0044	-0.0044	-0.0001	-0.0011	0.0000	11:55:44	No
2	0.0115	0.0115	0.0002	0.0019	0.0003	11:56:13	No
Mean:	0.0036	0.0036	0.0001				
SD :	0.01121	0.01121	0.0002				
%RSD:	314.2	314.2	314.1942				

QC value within specified limits.

Element: Hg Seq. No.: 21 AS Loc.: 19 Date: 06/27/2007
Sample ID: MB=W 14811

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak 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 :	0.00185	0.00185	0.0000				
%RSD:	12.5	12.5	12.4620				

Element: Hg Seq. No.: 22 AS Loc.: 20 Date: 06/27/2007
Sample ID: LCS-W 14811

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.970	1.970	0.0350	0.1548	0.0351	11:59:05	No
2	1.978	1.978	0.0351	0.1552	0.0352	11:59:34	No
Mean:	1.974	1.974	0.0351				
SD :	0.00531	0.00531	0.0001				
%RSD:	0.3	0.3	0.2710				

Element: Hg Seq. No.: 23 AS Loc.: 21 Date: 06/27/2007
Sample ID: 070621023-001A

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0128	0.0128	0.0002	0.0014	0.0004	12:00:46	No
2	0.0150	0.0150	0.0003	0.0015	0.0004	12:01:15	No
Mean:	0.0139	0.0139	0.0002				
SD :	0.00154	0.00154	0.0000				
%RSD:	11.1	11.1	11.1061				

Element: Hg Seq. No.: 24 AS Loc.: 22 Date: 06/27/2007
Sample ID: 070621023-002A

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak 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: Hg Seq. No.: 25 AS Loc.: 23 Date: 06/27/2007
Sample ID: 070621023-003A

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
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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				
SD :	0.00182	0.00182	0.0000				
%RSD:	24.1	24.1	24.1174				

Element: Hg Seq. No.: 26 AS Loc.: 24 Date: 06/27/2007
Sample ID: 070621023-003A DP

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0002	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
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 µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
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				
SD :	0.00115	0.00115	0.0000				
%RSD:							

Element: Hg Seq. No.: 28 AS Loc.: 26 Date: 06/27/2007
Sample ID: 070621023-004A

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak 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	0.0074	0.0001				
SD :	0.01207	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 µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0098	0.0098	0.0002	0.0015	0.0003	12:11:10	No
2	0.0085	0.0085	0.0001	0.0024	0.0003	12:11:39	No
Mean:	0.0091	0.0091	0.0002				
SD :	0.00090	0.00090	0.0000				
%RSD:	9.9	9.9	9.8722				

Element: Hg Seq. No.: 30 AS Loc.: 28 Date: 06/27/2007
Sample ID: 070621023-006A

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0072	0.0072	0.0001	0.0007	0.0003	12:12:55	No
2	0.0086	0.0086	0.0002	0.0010	0.0003	12:13:24	No
Mean:	0.0079	0.0079	0.0001				

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 µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak 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	0.01017	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 µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0014	0.0014	0.0000	-0.0003	0.0001	12:16:21	No
2	-0.0080	-0.0080	-0.0001	-0.0037	0.0000	12:16:50	No
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 µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak 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	0.0002				
%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 µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
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	0.0126	0.0002				
SD :	0.00285	0.00285	0.0001				
%RSD:	22.7	22.7	22.6690				

Element: Hg Seq. No.: 35 AS Loc.: 31 Date: 06/27/2007
 Sample ID: 070621023-009A

Repl #	SampleConc µg/L	StdConc µg/L	BlkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
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	0.00606	0.0001				

%RSD: 50.6 50.6 50.6265

Element: Hg Seq. No.: 36 AS Loc.: 32 Date: 06/27/2007
 Sample ID: 070621023-010A

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak 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				

Element: Hg Seq. No.: 37 AS Loc.: 33 Date: 06/27/2007
 Sample ID: 070621023-011A

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0090	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
Mean:	0.0070	0.0070	0.0001				
SD :	0.00285	0.00285	0.0001				
%RSD:	40.8	40.8	40.7773				

Element: Hg Seq. No.: 38 AS Loc.: 34 Date: 06/27/2007
 Sample ID: 070621023-012A

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak 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	0.0003	12:27:06	No
Mean:	0.0049	0.0049	0.0001				
SD :	0.00322	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 µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak 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:	0.0090	0.0090	0.0002				
SD :	0.00722	0.00722	0.0001				
%RSD:	80.6	80.6	80.6306				

Element: Hg Seq. No.: 40 AS Loc.: 36 Date: 06/27/2007
 Sample ID: 070621023-014A

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0076	0.0076	0.0001	0.0010	0.0003	12:29:57	No
2	0.0082	0.0082	0.0001	0.0013	0.0003	12:30:26	No
Mean:	0.0079	0.0079	0.0001				
SD :	0.00039	0.00039	0.0000				
%RSD:	4.9	4.9	4.9456				

Element: Hg Seq. No.: 41 AS Loc.: 37 Date: 06/27/2007
 Sample ID: 070621023-015A

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak 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	0.00793	0.0001				
%RSD:	102.2	102.2	102.1604				

Element: Hg Seq. No.: 42 AS Loc.: 38 Date: 06/27/2007
 Sample ID: 070621023-016A

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0130	0.0130	0.0002	0.0025	0.0004	12:33:19	No
2	0.0090	0.0090	0.0002	0.0019	0.0003	12:33:48	No
Mean:	0.0110	0.0110	0.0002				
SD :	0.00282	0.00282	0.0000				
%RSD:	25.6	25.6	25.5749				

Element: Hg Seq. No.: 43 AS Loc.: 4 Date: 06/27/2007
 Sample ID: QC Sample 1

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.977	1.977	0.0351	0.1545	0.0352	12:35:01	No
2	1.986	1.986	0.0353	0.1561	0.0354	12:35:30	No
Mean:	1.982	1.982	0.0352				
SD :	0.00627	0.00627	0.0001				
%RSD:	0.3	0.3	0.3189				

QC value within specified limits.

Element: Hg Seq. No.: 44 AS Loc.: 1 Date: 06/27/2007
 Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	-0.0019	-0.0019	0.0000	-0.0001	0.0001	12:36:42	No
2	0.0090	0.0090	0.0002	0.0007	0.0003	12:37:11	No
Mean:	0.0036	0.0036	0.0001				
SD :	0.00773	0.00773	0.0001				
%RSD:	215.9	215.9	215.9054				

QC value within specified limits.

Element: Hg Seq. No.: 45 AS Loc.: 39 Date: 06/27/2007
 Sample ID: 070621023-017A

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak 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	0.00322	0.0001				
%RSD:	40.6	40.6	40.5618				

Element: Hg Seq. No.: 46 AS Loc.: 40 Date: 06/27/2007

Sample ID: 070621023-017A DP

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0026	0.0026	0.0000	0.0002	0.0002	12:40:06	No
2	0.0113	0.0113	0.0002	0.0022	0.0003	12:40:35	No
Mean:	0.0070	0.0070	0.0001				
SD :	0.00613	0.00613	0.0001				
%RSD:	87.8	87.8	87.8455				

Element: Hg Seq. No.: 47 AS Loc.: 41 Date: 06/27/2007
 Sample ID: 070621023-017A MS

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.552	1.552	0.0275	0.1268	0.0276	12:41:49	No
2	1.569	1.569	0.0278	0.1293	0.0279	12:42:18	No
Mean:	1.561	1.561	0.0277				
SD :	0.01250	0.01250	0.0002				
%RSD:	0.8	0.8	0.8062				

Element: Hg Seq. No.: 48 AS Loc.: 42 Date: 06/27/2007
 Sample ID: 070621023-018A

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0152	0.0152	0.0003	0.0024	0.0004	12:43:31	No
2	0.0110	0.0110	0.0002	0.0016	0.0003	12:44:00	No
Mean:	0.0131	0.0131	0.0002				
SD :	0.00303	0.00303	0.0001				
%RSD:	23.1	23.1	23.0908				

Element: Hg Seq. No.: 49 AS Loc.: 43 Date: 06/27/2007
 Sample ID: MB-W

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.2203	0.2203	0.0039	0.0186	0.0040	12:45:14	No
2	0.2069	0.2069	0.0036	0.0148	0.0038	12:45:43	No
Mean:	0.2136	0.2136	0.0038				
SD :	0.00950	0.00950	0.0002				
%RSD:	4.4	4.4	4.4492				

Element: Hg Seq. No.: 50 AS Loc.: 44 Date: 06/27/2007
 Sample ID: LCS-W

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.794	1.794	0.0318	0.1461	0.0320	12:46:58	No
2	1.809	1.809	0.0321	0.1464	0.0322	12:47:27	No
Mean:	1.802	1.802	0.0320				
SD :	0.01079	0.01079	0.0002				
%RSD:	0.6	0.6	0.6033				

Element: Hg Seq. No.: 51 AS Loc.: 45 Date: 06/27/2007
 Sample ID: 070622041-001A

Repl #	SampleConc µg/L	StdConc µg/L	BlncCorr Signal	Peak Area	Peak Height	Time	Peak Stored
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#	µg/L	µg/L	Signal	Area	Height		Stored
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				

Element: Hg Seq. No.: 52 AS Loc.: 46 Date: 06/27/2007
Sample ID: 070622041-002A

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak 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	0.0014				
SD :	0.00706	0.00706	0.0001				
%RSD:	8.9	8.9	8.8761				

Element: Hg Seq. No.: 53 AS Loc.: 47 Date: 06/27/2007
Sample ID: 070622041-003A

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak 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	0.01054	0.0002				
%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 µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak 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	0.00950	0.0002				
%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 µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak 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				
SD :	0.02347	0.02347	0.0004				
%RSD:	1.2	1.2	1.2071				

QC value within specified limits.

Element: Hg Seq. No.: 56 AS Loc.: 1 Date: 06/27/2007
Sample ID: QC Sample 2

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0089	0.0089	0.0002	0.0018	0.0003	12:57:18	No

2 -0.0064 -0.0064 -0.0001 -0.0015 0.0000 12:57:47 No
Mean: 0.0012 0.0012 0.0000
SD : 0.01083 0.01083 0.0002
%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 µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
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				
SD :	0.00695	0.00695	0.0001				
%RSD:	3.9	3.9	3.8872				

Element: Hg Seq. No.: 58 AS Loc.: 50 Date: 06/27/2007
Sample ID: 070622041-006A

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak 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	0.00297	0.0001				
%RSD:	2.8	2.8	2.8433				

Element: Hg Seq. No.: 59 AS Loc.: 51 Date: 06/27/2007
Sample ID: 070622041-007A

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
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				
SD :	0.00187	0.00187	0.0000				
%RSD:	1.1	1.1	1.0814				

Element: Hg Seq. No.: 60 AS Loc.: 52 Date: 06/27/2007
Sample ID: 070622041-007A DP

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
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	0.00373	0.0001				
%RSD:	3.1	3.1	3.1357				

Element: Hg Seq. No.: 61 AS Loc.: 53 Date: 06/27/2007
Sample ID: 070622041-007A MS

Repl #	SampleConc µg/L	StdndConc µg/L	BlndCorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.649	1.649	0.0292	0.1357	0.0294	01:05:38	No
2	1.659	1.659	0.0294	0.1360	0.0295	01:06:07	No
Mean:	1.654	1.654	0.0293				

SD : 0.00714 0.00714 0.0001
 %RSD: 0.4 0.4 0.4346

Element: Hg Seq. No.: 62 AS Loc.: 54 Date: 06/27/2007
 Sample ID: MB-W

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
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	0.00462	0.0001				
%RSD:	32.6	32.6	32.6282				

Element: Hg Seq. No.: 63 AS Loc.: 55 Date: 06/27/2007
 Sample ID: LCS-W

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak 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 µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
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	0.01023	0.0002				
%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 µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
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	0.00860	0.0002				
%RSD:	21.1	21.1	21.0747				

Element: Hg Seq. No.: 66 AS Loc.: 58 Date: 06/27/2007
 Sample ID: 070622047-001F MS

Repl #	SampleConc µg/L	StndConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak 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				
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

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	1.930	1.930	0.0343	0.1549	0.0344	01:15:51	No
2	1.966	1.966	0.0349	0.1572	0.0350	01:16:20	No
Mean:	1.948	1.948	0.0346				
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 µg/L	StdConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.0088	0.0088	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	0.0074	0.0001				
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 µg/L	StdConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
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				
SD :	0.00066	0.00066	0.0000				
%RSD:	0.8	0.8	0.8424				

Element: Hg Seq. No.: 70 AS Loc.: 60 Date: 06/27/2007
 Sample ID: 070625007-001F

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
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	0.00147	0.0000				
%RSD:	2.3	2.3	2.3466				

Element: Hg Seq. No.: 71 AS Loc.: 61 Date: 06/27/2007
 Sample ID: 070625007-002F

Repl #	SampleConc µg/L	StdConc µg/L	Blncorr Signal	Peak Area	Peak Height	Time	Peak Stored
1	0.2417	0.2417	0.0043	0.0218	0.0044	01:22:43	No
2	0.2425	0.2425	0.0043	0.0213	0.0044	01:23:13	No
Mean:	0.2421	0.2421	0.0043				
SD :	0.00062	0.00062	0.0000				
%RSD:	0.3	0.3	0.2550				

Adirondack Environmental Services, Inc

PREP BATCH REPORT

Page: 1 of 4

Prep Start Date: 6/26/2007 9:58:23

Prep End Date: 6/26/2007 5:00:00

Prep Factor Units:

mL / mL

Technician: Keith Hammecker

Prep Batch 14830 Prep Code: 3010A

Sample ID	Matrix	pH	Res Cl	SampAmt	Sol Added	Flu Vol	factor	PrepStart	PrepEnd
070821023-001A	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
070821023-003A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-003AMS	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-003AMSD	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-004A	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		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-008A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-008A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-010A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-011A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-012A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-013A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-014A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-015A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-016A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
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

Number	Reagent Name
1255	Nitric Acid

Spk ID	Spike Name	SampType	AmtAdd
milcs-w	SP060626A		0
MT-SPIKE-lcp-2	HP519215		0

HotBlock/Bath Temp _____ °C
 BathStart/Time: _____ StopTime _____

Adirondack Environmental Services, Inc

PREP BATCH REPORT

Page: 2 of 4

Prep Start Date: 6/26/2007 9:58:23

Prep End Date: 6/26/2007 5:00:00

Prep Factor Units:

Prep Batch 14830 Prep Code: 3010A Technician: Keith Hammecker

mL / mL

Sample ID	Matrix	pH	Res Cl	SampAmt	Sol Added	Fin Vol	factor	PrepStart	PrepEnd
070821023-017AMSD	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
070821028-001F	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070821028-002F	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070821028-002FMS	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070821028-002FMDS	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070822013-003A	Wastewater		No	50	0	50	1.000	6/26/2007	6/26/2007
070822013-004A	Wastewater		No	50	0	50	1.000	6/26/2007	6/26/2007
070822016-005A	Wastewater		No	50	0	50	1.000	6/26/2007	6/26/2007
070822016-007A	Wastewater		No	50	0	50	1.000	6/26/2007	6/26/2007
070822016-008A	Wastewater		No	50	0	50	1.000	6/26/2007	6/26/2007
070822018-001C	Groundwater		No	50	0	50	1.000	6/26/2007	6/26/2007
070822035-001B	Wastewater		No	50	0	50	1.000	6/26/2007	6/26/2007
070822037-001C	Wastewater		No	50	0	50	1.000	6/26/2007	6/26/2007
070822041-001A	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070822041-002A	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070822041-003A	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070822041-004A	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070822041-005A	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070822041-006A	Water		No	100	0	100	1.000	6/26/2007	6/26/2007

Number	Reagent Name	Spk ID	Spike Name	SampType	AmtAdd
1255	Nitric Acid	mtlcs-w	SP060626A		0
		MT-SPIKE-icp-2	HP519215		0

HotBlock/Bath Temp _____ °C
 BathStartTime: _____ StopTime: _____

Adirondack Environmental Services, Inc

PREP BATCH REPORT

Page: 3 of 4

Prep Start Date: 6/26/2007 9:58:23

Prep End Date: 6/26/2007 5:00:00

Prep Factor Units:

Prep Batch 14830 Prep Code: 3010A Technician: Keith Hammecker

mL / mL

Sample ID	Matrix	pH	Res Cl	SampAmt	Sol Added	Fin Vol	factor	PrepStart	PrepEnd
070822041-007A	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070822041-007AMS	Water		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
070822042-008B	Water		No	50	0	50	1.000	6/26/2007	6/26/2007
070822042-008B	Water		No	50	0	50	1.000	6/26/2007	6/26/2007
070822043-001A	Wastewater		No	100	0	100	1.000	6/26/2007	6/26/2007
070822045-001B	Wastewater		No	50	0	50	1.000	6/26/2007	6/26/2007
070822047-001F	Water		No	50	0	50	1.000	6/26/2007	6/26/2007
070822047-002F	Water		No	50	0	50	1.000	6/26/2007	6/26/2007
070822047-003F	Water		No	50	0	50	1.000	6/26/2007	6/26/2007
070822061-001C	Drinking Water		No	50	0	50	1.000	6/26/2007	6/26/2007
070822063-001D	Wastewater		No	50	0	50	1.000	6/26/2007	6/26/2007
070822065-001B	Water		No	50	0	50	1.000	6/26/2007	6/26/2007
070822065-003C	Surface Water		No	50	0	50	1.000	6/26/2007	6/26/2007
070825007-001F	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070825007-002F	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070825009-001B	Groundwater		No	50	0	50	1.000	6/26/2007	6/26/2007
070825009-001BDP	Groundwater		No	50	0	50	1.000	6/26/2007	6/26/2007
070825009-001BMS	Groundwater		No	50	0	50	1.000	6/26/2007	6/26/2007
070825009-002B	Groundwater		No	50	0	50	1.000	6/26/2007	6/26/2007

Number	Reagent Name	Spk ID	Spike Name	SampType	AmtAdd
1255	Nitric Acid	mtlcs-w	SP060626A		0
		MT-SPIKE-icp-2	HP519215		0

HotBlock/Bath Temp _____ °C
BathStartTime: _____ StopTime: _____

Adirondack Environmental Services, Inc

PREP BATCH REPORT

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Prep Start Date: 6/26/2007 9:58:23

Prep End Date: 6/26/2007 5:00:00

Prep Factor Units:

Technician: Keith Hammecker

Prep Batch 14830 Prep Code: 3010A

mL / mL

Sample ID	Matrix	pH	Res Cl	SampAmt	Sol Added	Fin Vol	factor	PrepStart	PrepEnd
070625009-003B	Groundwater		No	50	0	50	1.000	6/26/2007	6/26/2007
070625009-004B	Groundwater		No	50	0	50	1.000	6/26/2007	6/26/2007
070625009-005B	Groundwater		No	50	0	50	1.000	6/26/2007	6/26/2007
070625009-006B	Groundwater		No	50	0	50	1.000	6/26/2007	6/26/2007
070628027-001B	Wastewater		No	50	0	50	1.000	6/26/2007	6/26/2007
070628027-002C	Wastewater		No	50	0	50	1.000	6/26/2007	6/26/2007
070628027-003A	Wastewater		No	50	0	50	1.000	6/26/2007	6/26/2007
070628027-004A	Wastewater		No	50	0	50	1.000	6/26/2007	6/26/2007
070628027-004ADP	Wastewater		No	50	0	50	1.000	6/26/2007	6/26/2007
070628027-004AMS	Wastewater		No	50	0	50	1.000	6/26/2007	6/26/2007
LCS-14830			No	100	0	100	1.000	6/26/2007	6/26/2007
MB-14830			No	100	0	100	1.000	6/26/2007	6/26/2007

Number	Reagent Name
1255	Nitric Acid

Spk ID	Spike Name	SampType	AmtAdd
mlcs-w	SP060626A		0
MT-SPIKE-icp-2	HP519215		0

HoldBlock/Bath Temp _____ °C
BathStartTime: _____ StopTime: _____

: 00167

Adirondack Environmental Services, Inc

PREP BATCH REPORT

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Prep Start Date: 6/26/2007 10:33:57

Prep End Date: 6/26/2007 5:00:00

Prep Factor Units:

Prep Batch 14811 Prep Code: HG_PREP Technician: Keith Hammecker

mL /

Sample ID	Matrix	pH	Res Cl	SampAmt	Sol Added	Fln Vol	factor	PrepStart	PrepEnd
070821004-001F	Wastewater		No	50	0	50	1.000	6/26/2007	6/26/2007
070821008-001F	Wastewater		No	50	0	50	1.000	6/26/2007	6/26/2007
070821007-001F	Wastewater		No	50	0	50	1.000	6/26/2007	6/26/2007
070821023-001A	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
070821023-003A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-003AMS	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-003AMSD	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-004A	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		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-008A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-009A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-010A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-011A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-012A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-013A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-014A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070821023-015A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007

Number	Reagent Name
1217	H2SO4-metals
1232	KMnO4
1255	Nitric Acid
1256	Potassium Persulfate-5%-metals

Spk ID	Spike Name	SampType	AntAdd
MTLCSHG-W	SP051013		0
MT-SPIKE-HG	SP060509A		0

HotBlock/Bath Temp _____ °C
BathStartTime: _____ StopTime: _____

Adirondack Environmental Services, Inc

PREP BATCH REPORT

Page: 2 of 3

Prep Start Date: 6/26/2007 10:33:57

Prep End Date: 6/26/2007 5:00:00

Prep Factor Units:
mL /

Prep Batch 14811 Prep Code: HG_PREP Technician: Keith Hammecker

Sample ID	Matrix	pH	Res Cl	SampAmt	Sol Added	Fin Vol	factor	PrepStart	PrepEnd
070621023-016A	Groundwater		No	100	0	100	1.000	6/26/2007	6/26/2007
070621023-017A	Surface Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070621023-017AMS	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
070621023-018A	Surface Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070622018-005A	Wastewater		No	50	0	50	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	0	50	100.000	6/26/2007	6/26/2007
070622032-002A	Liquid		No	0.5	0	50	100.000	6/26/2007	6/26/2007
070622032-003A	Liquid		No	0.5	0	50	100.000	6/26/2007	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	6/26/2007	6/26/2007
070622041-003A	Water		No	100	0	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		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
070622041-007A	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070622041-007AMS	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070622041-007AMSD	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070622043-001A	Wastewater		No	50	0	50	1.000	6/26/2007	6/26/2007

Number	Reagent Name
1217	H2SO4-metals
1232	KMnO4
1255	Nitric Acid
1256	Potassium Persulfate-5%-metals

Spk ID	Spike Name	SampType	AmtAdd
MTLCSHG-W	SP051013		0
MT-SPIKE-HG	SP060509A		0

HotBlock/Bath Temp _____ °C
BathStartTime: _____ StopTime _____

Adirondack Environmental Services, Inc

PREP BATCH REPORT

Page: 3 of 3

Prep Start Date: 6/26/2007 10:33:57

Prep End Date: 6/26/2007 5:00:00

Prep Factor Units:

Prep Batch 14811 Prep Code: HG_PREP Technician: Keith Hammecker

mL /

Sample ID	Matrix	pH	Res Cl	SampAmt	Sol Added	Fin Vol	factor	PrepStart	PrepEnd
070622047-001F	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070622047-001FMS	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070622047-001FMSD	Water		No	100	0	100	1.000	6/26/2007	6/26/2007
070622047-002F	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
070622067-001E	Water		No	100	0	100	1.000	6/25/2007	6/25/2007
070622067-001EDP	Water		No	100	0	100	1.000	6/25/2007	6/25/2007
070622067-001EMS	Water		No	100	0	100	1.000	6/25/2007	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	6/26/2007	6/26/2007
MB-14811			No	100	0	100	1.000	6/26/2007	6/26/2007

Number	Reagent Name
1217	H2SO4-metals
1232	KMnO4
1255	Nitric Acid
1256	Potassium Persulfate-5%-metals

Spk ID	Spike Name	SampType	AmtAdd
MTLCSHG-W	SP051013		0
MT-SPIKE-HG	SP060509A		0

HotBlock/Bath Temp _____ °C
BathStartTime: _____ StopTime _____

INORGANIC
ANALYSIS

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

SW-1-SU-7

LAB NAME: Adirondack Environmental

CONTRACT:

LAB CODE: AES

Case No.: ESE 0701

SAS No.:

SDG No.: SW-1-SU-7

Matrix (soil/water): Water

Lab Sample ID: 070622041-001

Level (Low/Med): Low

Date Received: 6/22/07

% Solids: 0.0

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

Analyte	Concentration	C	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	6.8			EPA 150.1
Turbidity	2.4			EPA 180.1
Color				EPA 110.2
Hexavalent Chromium				SW 7196

Comments

FORM I - CONV

: 00172

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

SW-2-SU-7

LAB NAME: Adirondack Environmental

CONTRACT:

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 Received: 6/22/07

% Solids: 0.0

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

Analyte	Concentration	C	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	7.2			EPA 150.1
Turbidity	1.5			EPA 180.1
Color				EPA 110.2
Hexavalent Chromium				SW 7196

Comments

FORM I - CONV

: 00173

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

SW-3-SU-7

LAB NAME: Adirondack Environmental

CONTRACT:

LAB CODE: AES

Case No.: ESE 0701

SAS No.:

SDG No.: SW-1-SU-7

Matrix (soil/water): Water

Lab Sample ID: 070622041-003

Level (Low/Med): Low

Date Received: 6/22/07

% Solids: 0.0

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

Analyte	Concentration	C	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	1.7			EPA 180.1
Color				EPA 110.2
Hexavalent Chromium				SW 7196

Comments

FORM I - CONV

: 00174

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

SW-6-SU-7

LAB NAME: Adirondack Environmental

CONTRACT:

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 Received: 6/22/07

% Solids: 0.0

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

Analyte	Concentration	C	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	7.6			EPA 150.1
Turbidity	5.8			EPA 180.1
Color				EPA 110.2
Hexavalent Chromium				SW 7196

Comments

FORM I - CONV

: 00175

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

SW-9-SU-7

LAB NAME: Adirondack Environmental

CONTRACT:

LAB CODE: AES

Case No.: ESE 0701

SAS No.:

SDG No.: SW-1-SU-7

Matrix (soil/water): Water

Lab Sample ID: 070622041-005

Level (Low/Med): Low

Date Received: 6/22/07

% Solids: 0.0

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

Analyte	Concentration	C	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

FORM I - CONV

: 00176

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

SW-10-SU-7

LAB NAME: Adirondack Environmental

CONTRACT:

LAB CODE: AES

Case No.: ESE 0701

SAS No.:

SDG No.: SW-1-SU-7

Matrix (soil/water): Water

Lab Sample ID: 070622041-006

Level (Low/Med): Low

Date Received: 6/22/07

% Solids: 0.0

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

Analyte	Concentration	C	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

: 00177

U.S. EPA - CLP

1

CONVENTIONALS ANALYSIS DATA SHEET

SW-11-SU-7

LAB NAME: Adirondack Environmental

CONTRACT:

LAB CODE: AES

Case No.: ESE 0701

SAS No.:

SDG No.: SW-1-SU-7

Matrix (soil/water): Water

Lab Sample ID: 070622041-007

Level (Low/Med): Low

Date Received: 6/22/07

% Solids: 0.0

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

Analyte	Concentration	C	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

: 00178

U.S. EPA - CLP

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

Analyte	Initial Calibration			Continuing Calibration			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
pH							
Turbidity							
Color							
Hexavalent Chromium							

Comments

FORM II (Part 1) - CONV

: 00179

U.S. EPA - CLP

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

Analyte	Continuing Calibration			Continuing Calibration			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	301	100	300	301	100	EPA 9012
pH							
Turbidity							
Color							
Hexavalent Chromium							

Comments

FORM II (Part 1) - CONV

: 00180

U.S. EPA - CLP

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

Analyte	Continuing Calibration			Continuing Calibration			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	299	100	300	302	101	EPA 9012
pH							
Turbidity							
Color							
Hexavalent Chromium							

Comments

FORM II (Part 1) - CONV

: 00181

U.S. EPA - CLP

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

Analyte	Continuing Calibration			Continuing Calibration			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	302	101				EPA 9012
pH							
Turbidity							
Color							
Hexavalent Chromium							

Comments

FORM II (Part 1) - CONV

: 00182

U.S. EPA - CLP

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

Analyte	Continuing Calibration			Continuing Calibration			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	302	101				EPA 9012
pH							
Turbidity							
Color							
Hexavalent Chromium							

Comments

FORM II (Part 1) - CONV

: 00182

U.S. EPA - CLP

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

Analyte	Initial Calibration			Initial Calibration			Method
	TRUE	Found	% R	TRUE	Found	% R	
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	10.4	104				EPA 9012
pH							EPA 150.1
Turbidity							EPA 180.1
Color							EPA 110.2
Hexavalent Chromium							SW 7196

Comments

FORM II (Part 2) - CONV

: 00183

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental

CONTRACT:

LAB CODE: AES

Case No.: ESE 0701

SAS No.:

SDG No.: SW-1-SU-7

Preparation Blank Matrix:

Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration						Prep. Blank C	Method
			1	C	2	C	3	C		
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	10	U	10	U
pH										EPA 9012
Turbidity										EPA 150.1
Color										EPA 180.1
Hexavalent Chromium										EPA 110.2
										SW 7196

Comments

FORM III - CONV

: 00184

U.S. EPA - CLP

3
BLANKS

LAB NAME: Adirondack Environmental

CONTRACT:

LAB CODE: AES

Case No.: ESE 0701

SAS No.:

SDG No.: SW-1-SU-7

Preparation Blank Matrix:

Water

Preparation Blank Concentration Units: ug/L

Analyte	Initial Calib. Blank(ug/L)	C	Continuing Calibration						Prep. Blank C	Method
			1	C	2	C	3	C		
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

: 00185

U.S. EPA - CLP

5

SPIKE SAMPLE RECOVERY

SW-11-SU-7

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

Analyte	Control Limit % R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	% R	Q	M
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols									
Chloride									
Bromide									
Eh									
Specific Conductance									
Cyanide	75-125	92		10	U	100	92		
pH									
Turbidity									
Color									
Hexavalent Chromium									

Comments

FORM V (Part 1) - CONV

: 00186

U.S. EPA - CLP

6

DUPLICATES

SW-11-SU-7

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 for Sample: 0.0

% Solids for Duplicate: 0.0

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

Analyte	Control Limit % R	Sample (S)	C	Duplicate (D)	C	% R	Q	M
TKN as N								
Ammonia, as N								
Nitrate								
COD								
BOD 5								
TOC								
TDS								
Sulfate								
Alkalinity								
Total Phenols								
Chloride								
Bromide								
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								
Hexavalent Chromium								

Comments

FORM VI - CONV

: 00187

U.S. EPA - CLP

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

Analyte	Aqueous (ug/L)			Solid (mg/Kg)					
	TRUE	Found	% R	TRUE	Found	C	Limits	% R	
TKN as N									
Ammonia, as N									
Nitrate									
COD									
BOD 5									
TOC									
TDS									
Sulfate									
Alkalinity									
Total Phenols									
Chloride									
Bromide									
Eh									
Specific Conductance									
Cyanide	509	478	94						
pH	6.32	6.39	101						
Turbidity	1.0	1.0	100						
Color									
Hexavalent Chromium									

Comments

FORM VII - CONV

: 00188

RAW QC

DATA

CH 0705

SNH

Page No.
07/05/07

1

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

SAMPLE ID =====	CHANNEL #2 AMMONIA Cyanide =====
-----------------------	---

	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
	1.00
500.0 PPB	498.73
500.0 PPB	499.38
400.0 PPB	399.57
200.0 PPB	201.94
100.0 PPB	101.21
50.00 PPB	49.33
10.00 PPB	9.90
500.0 PPB	499.90
100.0 PPB	100.82
100.0 PPB	100.71
ICV 300 PPB	304.12
ICB	-0.11
CRDL 10 PPB	10.36
PB 07/02/07	0.06 ✓
LCS 07/02/07	478.50 ✓ = 93.10

: 00190

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

SAMPLE ID =====	CHANNEL #2 AMMONIA =====
CCV 300 PPB	302.33
CCB	-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 0622041-7SK	92.41 ✓
CCV 300PPB	301.07
CCB	-0.58
MOR 0626005-5	-0.51 ✓
MOR 0626005-6	-0.45 ✓
SUN 0629062-1 EX	-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 ✓

779810
00181

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

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-BW	-0.77 ✓
NYD 0622009-6DP	35.78
NYD 0622009-6SK	123.44
CCV 300PPB	299.15
CCB	-0.85
DNT 0629044-1	0.47 ✓
CLE 0702025-1	68.68 ✓
IPT 0626040-1	-0.69 ✓
CLO 0628043-1	3.14 ✓
CLO 0628043-2	5.90 ✓
CLO 0628043-3	-0.57 ✓
CLO 0628043-4	3.11 ✓
VOD 0629040-1	0.70 ✓
PB 07/05/07	-0.68 ✓
LCS 07/05/07	499.91 ✓

98%
00192

Adirondack Environmental Services, Inc.
314 North Pearl Street
Albany, NY 12207

SAMPLE ID =====	CHANNEL #2 AMMONIA =====
CCV 300PPB	302.09
CCB	-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	0.18 ✓
MOR 0628038-4	-0.62 ✓
MOR 0628038-5	-0.78 ✓
MOR 0628038-6	-0.16 ✓
CCV 300PPB	302.16
CCB	-0.98
200.0 PPB	201.05
500.0 PPB	499.38

Technicon TRAACS 800 System Editor

Goto --> 000 Third Screen

Cup#	Peak#	Count	Type	Sample ID	Weight	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
3	4	2	C	200.0 PPB	1.000000	1.000000	N
4	5	3	C	100.0 PPB	1.000000	1.000000	N
5	6	1	C	50.00 PPB	1.000000	1.000000	N
6	7	1	C	10.00 PPB	1.000000	1.000000	N
7	11	1	S	ICV 300 PPB	1.000000	1.000000	N
8	12	1	S	ICB	1.000000	1.000000	N
9	13	1	S	CRDL 10 PPB	1.000000	1.000000	N
10	14	1	S	PB 07/02/07	1.000000	1.000000	N
11	15	1	S	LCS 07/02/07	1.000000	2.000000	N
12	16	1	S	CCV 300 PPB	1.000000	1.000000	N
13	17	1	S	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 specified cup

1 Copy 2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 7 Sc Up 8 Sc dn 9 DIR 0 ConDel

Technicon TRAACS 800 System Editor

Goto --> 000 Third Screen

Cup#	Peak#	Count	Type	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	N
27	31	1	S	MOR 0626005-6 <i>new</i>	1.000000	1.000000	N
28	32	1	S	SUN 0629062-1 2	1.000000	1.000000	N
29	33	1	S	SUN 0629064-1	1.000000	1.000000	N
30	34	1	S	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 300PPB	1.000000	1.000000	N
37	41	1	S	CCB	1.000000	1.000000	N
38	42	1	S	PAR 0702031-4	1.000000	1.000000	N
39	43	1	S	ENV 0629030-1	1.000000	1.000000	N
40	44	1	S	WAT 0702035-1	1.000000	1.000000	N

Sample id for the specified cup

1 Copy 2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 7 Sc Up 8 Sc dn 9 DIR 0 ConDel

Technicon TRAACS 800 System Editor

000 Third Screen

Cup#	Peak#	Count	Type	Sample ID	Weight	Dilution	Spike
41	45	1	S	PAR 0702031-1..	1.000000	1.000000	N
42	46	1	S	FIN 0627055-6	1.000000	1.000000	N
43	47	1	S	FIN 0627055-8	1.000000	1.000000	N
44	48	1	S	FIN 0627055-6W	1.000000	1.000000	N
45	49	1	S	FIN 0627055-8W	1.000000	1.000000	N
46	50	1	S	NYD 0622009-6DP	1.000000	1.000000	N
47	51	1	S	NYD 0622009-6SK	1.000000	1.000000	N
48	52	1	S	CCV 300PPB	1.000000	1.000000	N
49	53	1	S	CCB	1.000000	1.000000	N
50	54	1	S	DNT 0629044-1	1.000000	1.000000	N
51	55	1	S	CLE 0702025-1	1.000000	1.000000	N
52	56	1	S	IPT 0626040-1	1.000000	1.000000	N
53	57	1	S	CLO 0628043-1	1.000000	1.000000	N
54	58	1	S	CLO 0628043-2	1.000000	1.000000	N
55	59	1	S	CLO 0628043-3	1.000000	1.000000	N
56	60	1	S	CLO 0628043-4	1.000000	1.000000	N
57	61	1	S	VDD 0629040-1	1.000000	1.000000	N
58	62	1	S	PB 07/05/07	1.000000	1.000000	N
59	63	1	S	LCS 07/05/07	1.000000	2.000000	N
60	64	1	S	CCV 300PPB	1.000000	1.000000	N

Sample id for the specified cup

1 Copy 2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 7 Sc Up 8 Sc dn 9 DIR 0 ConDel

Technicon TRAACS 800 System Editor

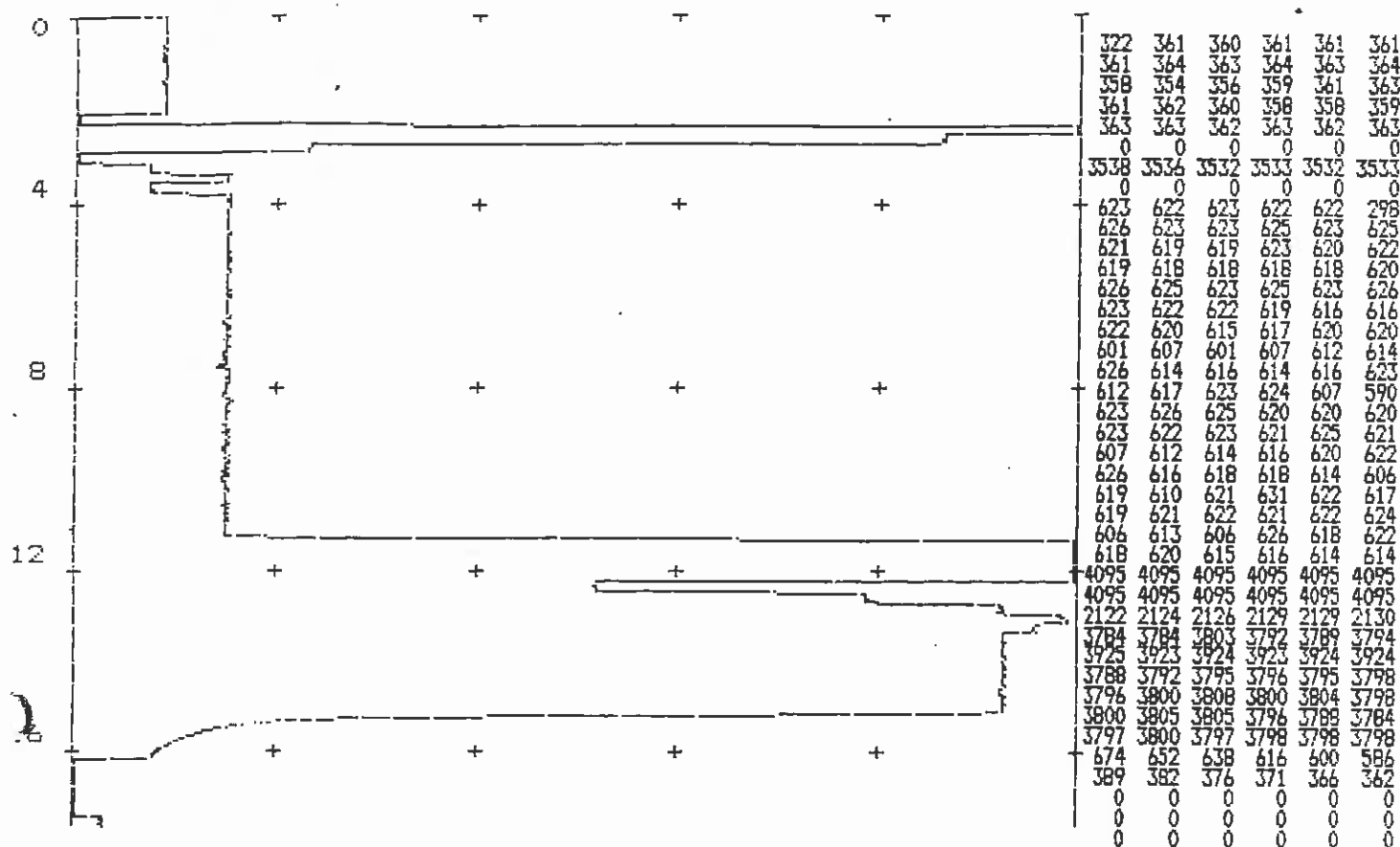
000 Third Screen

Cup#	Peak#	Count	Type	Sample ID	Weight	Dilution	Spike
61	65	1	S	CCB.....	1.000000	1.000000	N
62	66	1	S	IPT 0626040-2	1.000000	1.000000	N
63	67	1	S	IPT 0626040-3	1.000000	1.000000	N
64	68	1	S	MOR 0628038-1	1.000000	1.000000	N
65	69	1	S	MOR 0628038-2	1.000000	1.000000	N
66	70	1	S	MOR 0628038-3	1.000000	1.000000	N
67	71	1	S	MOR 0628038-4	1.000000	1.000000	N
68	72	1	S	MOR 0628038-5	1.000000	1.000000	N
69	73	1	S	MOR 0628038-6	1.000000	1.000000	N
70	74	1	S	CCV 300PPB	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					1.000000	1.000000	N

Sample id for the specified cup

1 Copy 2 Edone 3 Res E 4 Exit 5 Rd fi 6 Wr fi 7 Sc Up 8 Sc dn 9 DIR 0 ConDel

Int minimum: 0%, maximum 100%
Active analyses: 2



Base and gain found. They are:

Channel 2: base 70, gain 28, rel. abs. 0.39. Actual low 3%, high 89%.

Actual lag time: 9.3 min. Base and gain were changed from 73 19.

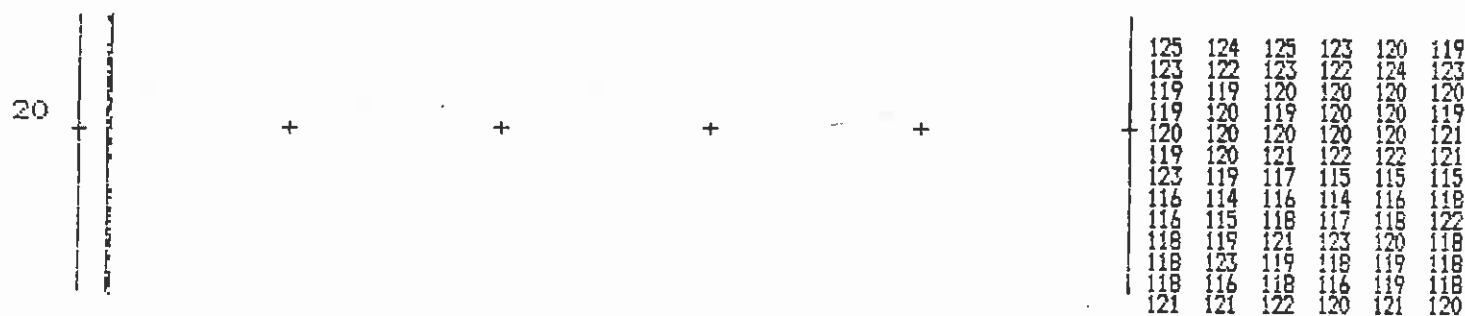
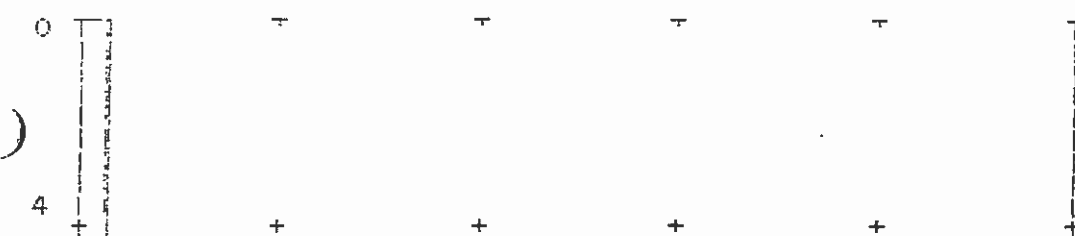


Chart minimum: 0%, maximum 100%

Active analyses: 2



Input Filename: B:CYANIDE.INP

Time: 13:22; Date: 07-05-107

Operator: SNH

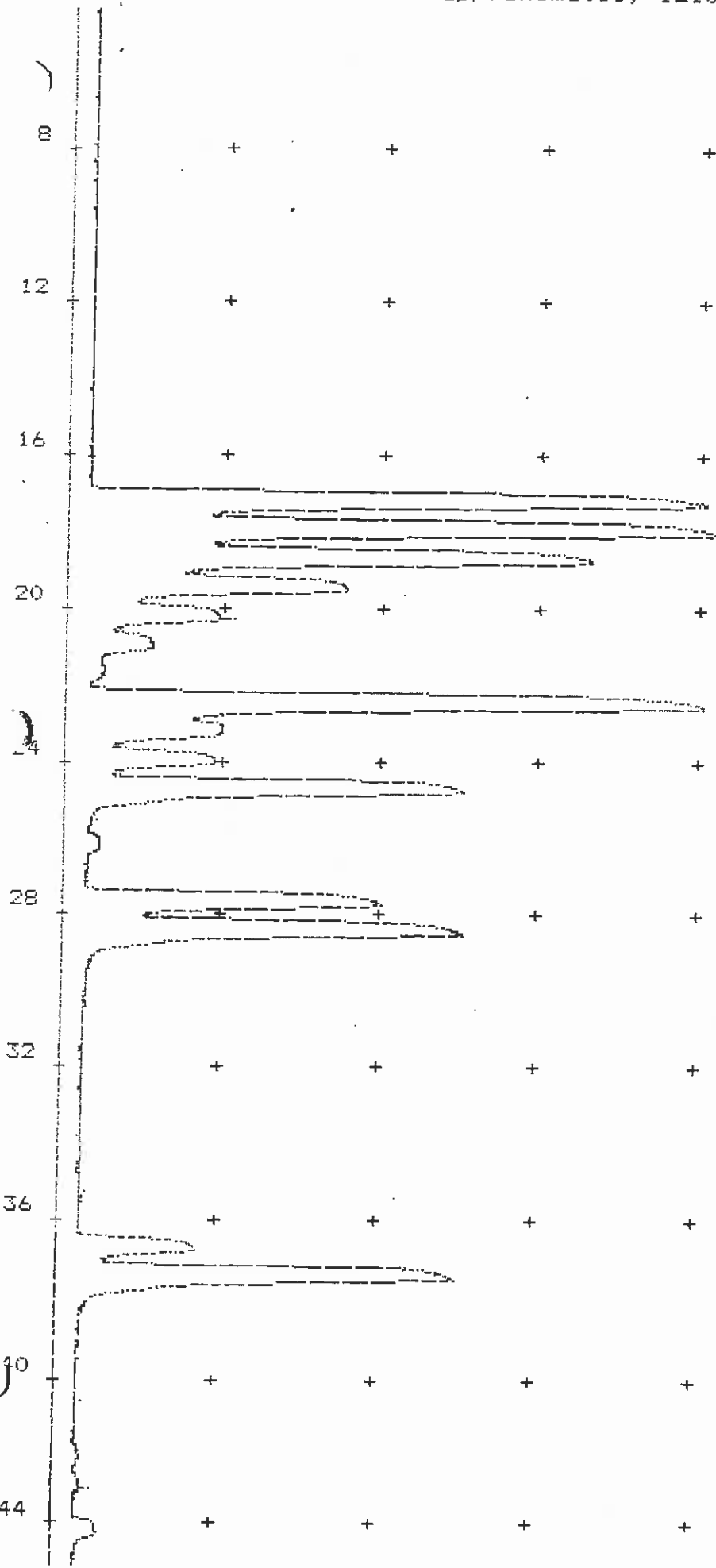
Comment:

: 00196

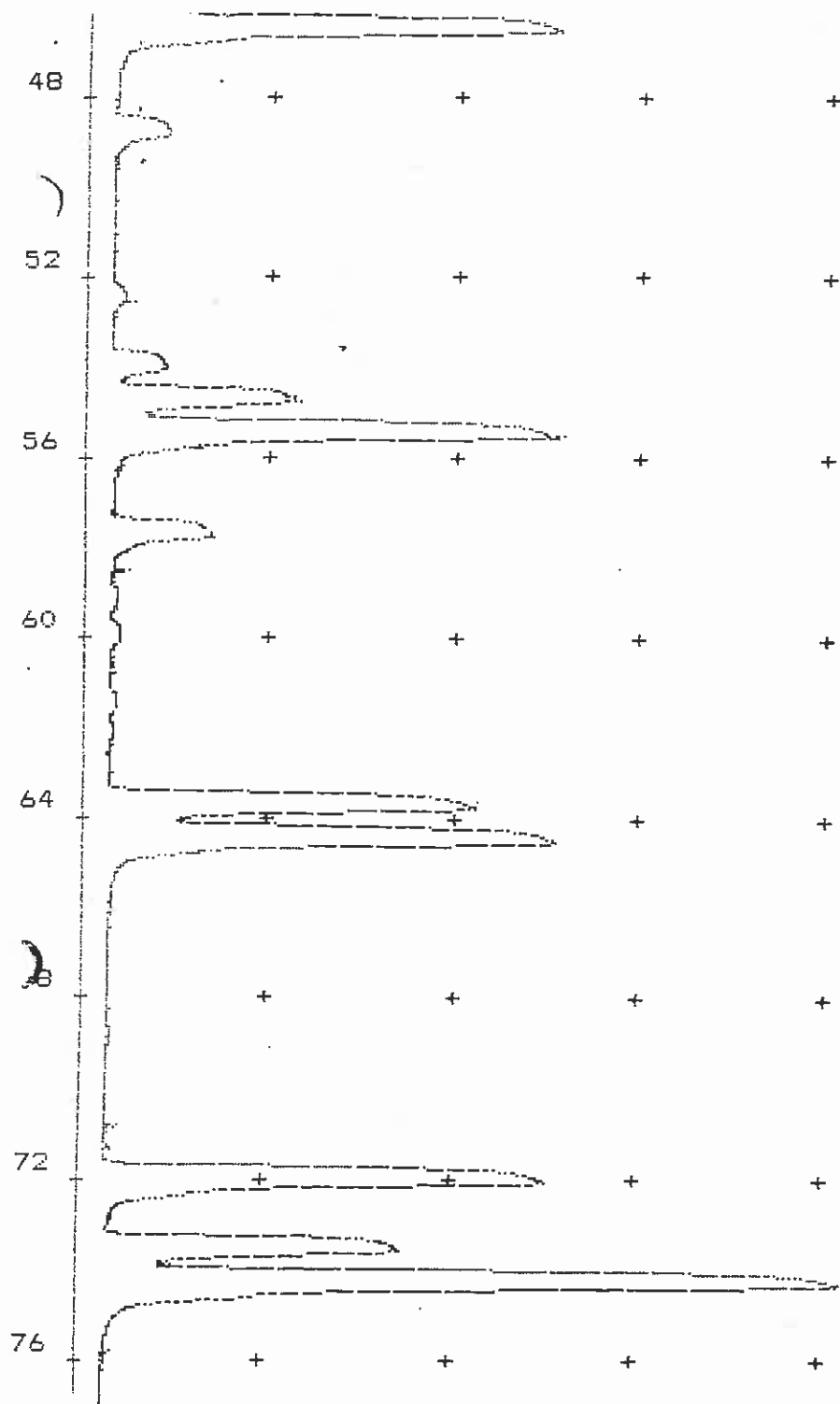
There are 6864896 (bytes) free on disk.
File B:CN0705.CHR will take approximately 12105 (bytes).

Channels
Base:
Gain:

2
70
28
cyanide
ug/l



Init base				114
PK	1 CP	1 typ P		
	Rel Abs			0.36
PK	2 CP	1 typ C		
PK	3 CP	2 typ C		
PK	4 CP	3 typ C		
PK	5 CP	4 typ C		N
PK	6 CP	5 typ C		
PK	7 CP	6 typ C		9.505 M
PK	8 CP	1 typ H		491.8
PK	9 CP	4 typ L		105.8
PK	10 CP	4 typ L		99.89
PK	11 CP	7 typ S		300.3
PK	12 CP	8 typ S		3.468 M
PK	13 CP	9 typ S		9.350 M
PK	14 CP	10 typ S		-0.7105 M
PK	15 CP	11 typ S		235.0
PK	16 CP	12 typ S		300.8
PK	17 CP	13 typ S		3.623 M
PK	18 CP	14 typ S		-0.2462 M
PK	19 CP	15 typ S		-0.8653 M
PK	20 CP	16 typ S		-2.413 M
PK	21 CP	17 typ S		-1.330 M
PK	22 CP	18 typ S		-1.484 M
PK	23 CP	19 typ S		-1.639 M
PK	24 CP	20 typ S		-2.568 M
PK	25 CP	21 typ S		-0.8653 M
PK	26 CP	22 typ S		-1.020 M
PK	27 CP	23 typ S		90.45
PK	28 CP	24 typ S		297.8
PK	29 CP	25 typ S		3.159 M
PK	30 CP	26 typ S		-1.175 M
PK	31 CP	27 typ S		-1.175 M
PK	32 CP	28 typ S		-1.020 M
PK	33 CP	29 typ S		-1.794 M
PK	34 CP	30 typ S		1.921 M
PK	35 CP	31 typ S		-2.075 M
PK	36 CP	32 typ S		-1.175 M
PK	37 CP	33 typ S		20187



PK 39	CP 35	typ S	246.5
PK 40	CP 36	typ S	300.9
PK 41	CP 37	typ S	3.314 M
PK 42	CP 38	typ S	0.2181 M
PK 43	CP 39	typ S	35.51
PK 44	CP 40	typ S	-1.020 M
PK 45	CP 41	typ S	-1.484 M
PK 46	CP 42	typ S	-1.949 M
PK 47	CP 43	typ S	-1.175 M
PK 48	CP 44	typ S	6.254 M
PK 49	CP 45	typ S	-1.175 M
PK 50	CP 46	typ S	34.89
PK 51	CP 47	typ S	122.2 N
PK 52	CP 48	typ S	297.4 N
PK 53	CP 49	typ S	3.159 M
PK 54	CP 50	typ S	0.06337 M
PK 55	CP 51	typ S	67.55
PK 56	CP 52	typ S	-0.09141 M
PK 57	CP 53	typ S	2.695 M
PK 58	CP 54	typ S	5.480 M
PK 59	CP 55	typ S	-0.8653 M
PK 60	CP 56	typ S	2.695 M
PK 61	CP 57	typ S	0.3729 M
PK 62	CP 58	typ S	-1.020 M
PK 63	CP 59	typ S	247.2
PK 64	CP 60	typ S	302.6
PK 65	CP 61	typ S	3.468 M
PK 66	CP 62	typ S	0.06337 M
PK 67	CP 63	typ S	-1.484 M
PK 68	CP 64	typ S	-0.7105 M
PK 69	CP 65	typ S	-0.7105 M
PK 70	CP 66	typ S	-0.09141 M
PK 71	CP 67	typ S	-0.8653 M
PK 72	CP 68	typ S	-1.020 M
PK 73	CP 69	typ S	-0.4010 M
PK 74	CP 70	typ S	299.4
PK 75	CP 71	typ S	3.314 M
PK 76	CP 3	typ I	199.3
PK 77	CP 1	typ G	498.1 N

Last base 120

Time: 13:22; Date: 07-05-107
Operator: SNH

Comment:

Channels 2
Base: 70
Min: 28

cyanide
uq/1

Base drift correction made
Carryover correction made
Gain drift correction made

Init base 114

: 00198

PK	2	CP	1	typ C	499.4	} 2-1.0
PK	3	CP	2	typ C	399.6	
PK	4	CP	3	typ C	201.9	
PK	5	CP	4	typ C	101.2 N	
PK	6	CP	5	typ C	49.33	
PK	7	CP	6	typ C	9.901 M	
PK	8	CP	1	typ H	499.9	
PK	9	CP	4	typ L	100.8	
PK	10	CP	4	typ L	100.7	
PK	11	CP	7	typ S	304.1	
PK	12	CP	8	typ S	-0.1074 M	
PK	13	CP	9	typ S	10.36 M	
PK	14	CP	10	typ S	0.05759 M	
PK	15	CP	11	typ S	239.2	
PK	16	CP	12	typ S	302.3	
PK	17	CP	13	typ S	-0.01603 M	
PK	18	CP	14	typ S	0.5685 M	
PK	19	CP	15	typ S	-0.01200 M	
PK	20	CP	16	typ S	-1.583 M	
PK	21	CP	17	typ S	-0.4731 M	
PK	22	CP	18	typ S	-0.6581 M	
PK	23	CP	19	typ S	-0.8242 M	
PK	24	CP	20	typ S	-1.774 M	
PK	25	CP	21	typ S	-0.04697 M	
PK	26	CP	22	typ S	-0.2413 M	
PK	27	CP	23	typ S	92.41	
PK	28	CP	24	typ S	301.1	
PK	29	CP	25	typ S	-0.5821 M	
PK	30	CP	26	typ S	-0.5059 M	
PK	31	CP	27	typ S	-0.4518 M	
PK	32	CP	28	typ S	-0.3067 M	
PK	33	CP	29	typ S	-1.104 M	
PK	34	CP	30	typ S	2.656 M	
PK	35	CP	31	typ S	2.745 M	
PK	36	CP	32	typ S	-0.5594 M	
PK	37	CP	33	typ S	16.24	
PK	38	CP	34	typ S	-0.1582 M	
PK	39	CP	35	typ S	250.0	
PK	40	CP	36	typ S	301.3	
PK	41	CP	37	typ S	-0.6121 M	
PK	42	CP	38	typ S	0.7610 M	
PK	43	CP	39	typ S	36.49	
PK	44	CP	40	typ S	-1.003 M	
PK	45	CP	41	typ S	-0.9302 M	
PK	46	CP	42	typ S	-1.404 M	
PK	47	CP	43	typ S	-0.6263 M	
PK	48	CP	44	typ S	6.861 M	
PK	49	CP	45	typ S	-0.7739 M	
PK	50	CP	46	typ S	35.78	
PK	51	CP	47	typ S	123.4 N	
PK	52	CP	48	typ S	299.2 N	
PK	53	CP	49	typ S	-0.8540 M	
PK	54	CP	50	typ S	0.4660 M	
PK	55	CP	51	typ S	68.68	
PK	56	CP	52	typ S	-0.6894 M	
PK	57	CP	53	typ S	3.138 M	
PK	58	CP	54	typ S	5.898 M	
PK	59	CP	55	typ S	-0.5656 M	
PK	60	CP	56	typ S	3.114 M	
PK	61	CP	57	typ S	0.7036 M	
PK	62	CP	58	typ S	-0.6794 M	
PK	63	CP	59	typ S	250.0	
PK	64	CP	60	typ S	302.1	
PK	65	CP	61	typ S	-0.7603 M	

PK	68	CP	64	typ	S	-0.4085	M
PK	69	CP	65	typ	S	-0.4318	M
PK	70	CP	66	typ	S	0.1811	M
PK	71	CP	67	typ	S	-0.6206	M
PK	72	CP	68	typ	S	-0.7766	M
PK	73	CP	69	typ	S	-0.1614	M
PK	74	CP	70	typ	S	302.2	
PK	75	CP	71	typ	S	-0.9830	M
PK	76	CP	3	typ	I	201.1	
PK	77	CP	1	typ	G	499.4	N
Last base						120	

Sample statistics

Anal	level	cups	avg	std dev	cv
1	all	65	49.84	104	208%

Anal 1: linear fit
Carryover factor: 1.50%.

Chart saved to file B:CN0705.CHR.

text file B:CN0705.TXT has been saved to disk.

Earth Science

I22

✓

pH C to P

12⁴⁰ 14⁰¹

6.22.07B ✓

sample ID
622041-1 SW-1
2 2
3 3
4 6
5 9
6 10
7 11

pH (m)
6.8
7.2
7.4
7.6
7.5
7.4
7.36
7.39
6.39 A =

> D < 1%

deep
Ref. 549704 - 6.32 sec

✓

Turbidity C/P

6.22.07A

12:40-14

Sample ID

Turb. (NTU)

622041 -1 500-1

2.4

2

2

1.5

3

3

1.7

4

6

5.8

5

9

2.2

6

10

2.9

7

11

3.4

SP

deep 7

3.6

Ref of 1.0 NTU

1.0

A = 100°

Sample Id	Vol	pH	phac	App	Notes
Blank	50	✓		1	SDH
CS	25			2	09.02.03
n 0622041-1	50	✓	✓	3	
-2	50	✓	✓	4	
0 -3	50	✓	✓	5	
0 -4	50	✓	✓	6	
-5	50	✓	✓	7	
-6	50	✓	✓	8	
-7	50	✓	✓	9	
n 0622005-1	50	✓	✓	10	
n 0629041-1	50	✓	✓	1	SDH
-2	50	✓	✓	2	09.02.03
for 0629045-1	50	✓	✓	3	
-6	50	✓	✓	4	
Env 0629062-1	50	✓	✓	5	
Env 0629064-1	50	✓	✓	6	
Env 0629046-1	50	✓	✓	7	
Env 0629049-1	50	✓	✓	8	
Env 0629041-1	50	✓	✓	9	
Env 0629031-1	50	✓	✓	10	
Blank	50			1	SDH
CS	25			2	09.02.03
n 0629031-1	50	✓	✓	3	
n 0629030-1	50	✓	✓	4	
at 0629035-1	50	✓	✓	5	
for 0629031-1	50	✓	✓	6	
for 0629035-1	50	✓	✓	7	
for 0629035-1	50	✓	✓	8	
-8	50	✓	✓	9	
-6W	50			10	
-8W	50				