39826

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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October 17, 2007 7004 2510 0001 8616 9981

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St. Paul, Minnesota 55112

Refer to: 0316005427 – Cook County
Chicago/H. Kramer & Co
Site Remediation/Technical Reports

Dear Mr. Frehner:

The Illinois EPA has reviewed the *Updated Focused Site Investigation Report* (Updated FSIR dated September 2007/Log No. 07-35280). The Illinois EPA approves of the Updated FSIR with consideration to the following.

Areas where soil lead TCLP concentrations exceed the regulatory threshold of 5 mg/L should be identified on the iso-concentration maps.

The Illinois EPA will look forward to review of a Remedial Objectives Report and Remedial Action Plan. If you have any questions, please call me at 217-524-4823.

Sincerely,

Timothy J. Murphy
Site Remediation Program
Remedial Project Management Section
Bureau of Land

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UPDATED FOCUSED SITE INVESTIGATION REPORT

H. KRAMER
CHICAGO, ILLINOIS

PRINTED ON

SEP 24 2007

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UPDATED FOCUSED SITE INVESTIGATION REPORT

H. KRAMER
CHICAGO, ILLINOIS

Prepared by:
Conestoga-Rovers & Associates

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1.0 INTRODUCTION

This updated Focused Site Investigation (FSI) Report summarizes the investigations and resulting data obtained during the soil and recent groundwater investigations completed at and adjacent to the H. Kramer Facility located in Chicago, Illinois (Site). The investigations were conducted to define soil and groundwater conditions at the Site with respect to metals concentrations. The location of the Site is shown on Figure 1 and a Site plan is illustrated on Figure 2.

H. Kramer has completed a DRM-1 form and is managing the Site under the State of Illinois Site Remediation Program.

This report also summarizes the data from three previously submitted reports to the Illinois Environmental Protection Agency (Illinois EPA) into one comprehensive report. The previously submitted reports were:

- Site Investigation Report dated September 2005;
- Additional Soil Sampling Investigation-Southwest Parking Lot Area dated March 2006; and
- Revised Focused Site Investigation Report, dated November 2006.

This document was prepared to meet the requirements of a FSI report as described at Section 740.430 of the Illinois regulations (IPCB 1997b). As such, this report is organized into the following sections:

1.0 Introduction;

2.0 Site Background;

3.0 Investigations/Scope of Work;

4.0 Site Setting;

5.0 CRA Analytical Results;

6.0 Endangerment Assessment; and

7.0 Conclusions.

On August 30, 2005 representatives of H. Kramer met with representatives of the Illinois EPA and the Chicago Department of Environment (CDOE) to discuss the results from work completed at the H. Kramer Facility and the surrounding area during Phase 1 and 2. The data presented during this meeting demonstrated that the surficial soils in

the Pilsen area of Chicago contain lead at levels which are not statistically different than levels found throughout the Chicago area in a 2001-2002 study conducted by the United States Geological Survey, in cooperation with the CDOE. The resulting agreement from this meeting was that H. Kramer only needed to focus on addressing on-Site soil conditions. Therefore, this FSI report is focused on on-Site conditions.

2.0 SITE BACKGROUND

H. Kramer is a brass ingot foundry located at 1345 West 21st Street in Chicago, Illinois. H. Kramer is a family-owned business and has operated continuously at its current location since the 1920s. A significant number of the company's employees live in the Pilsen neighborhood.

The Site is located in the City of Chicago in the portion of Chicago referred to as Pilsen, which is located to the southwest of the Loop. Pilsen historically developed for industrial use. The land near the Site is zoned industrial and has been historically used for manufacturing. The Site is bordered by South Loomis Street to the west, South Throop Street to the east, West 21st Street to the north, and a rail road easement, industrial properties, and Cermak Road to the south. Industrial facilities are located adjacent to the Site to the south, east and west, and a combination of commercial/industrial and residential properties to the north of the Site.

The entire Site is paved or covered with compacted gravel or is beneath buildings. There are no open or grassy areas. A City of Chicago Ordinance prohibits the installation and use of water wells within the City limits. Drinking water for the entire City of Chicago comes from Lake Michigan.

3.0 INVESTIGATIONS / SCOPE OF WORK

The investigations discussed in this report were performed in four phases.

Phase 1

During Phase 1, Conestoga-Rovers & Associates (CRA) provided oversight of the soil investigation being completed by the Illinois EPA at the Site. The Illinois EPA was conducting soil investigations at the Site in response to requests from a local citizens group. The focus of the Illinois EPA's investigation was to determine metals concentrations within open unpaved areas of the Site and in areas surrounding the Site. CRA collected split soil samples with the Illinois EPA. Mr. Walter Pochron of CRA observed the work performed at the Site by the Illinois EPA on June 14, 2005.

Phase 2

The second phase (Phase 2) was conducted to obtain additional information following a review of the preliminary Phase 1 analytical results from CRA's split samples. The Phase 2 soil investigation was conducted to further evaluate soils on the Site with respect to the vertical distribution of metals.

Phase 3

The third phase (Phase 3) was conducted in response to a request from the Illinois EPA to perform additional soil investigative activities. The additional investigation included:

- completion of soil borings at the southwest parking lot area; and
- collection and analysis of investigative soil samples from the soil borings.

The specific investigative activities detailed above were completed in accordance with the October 14, 2005 CRA Work Plan for Additional Soil Sampling and the January 2, 2006 CRA letter responding to the Illinois EPA letter dated November 21, 2005. The November Illinois EPA letter issued conditional approval of the Work Plan.

Phase 4

The fourth phase (Phase 4) was conducted in response to a request of the Illinois EPA to perform groundwater investigation. The groundwater investigation included:

- installation and sampling of five monitoring wells;

- completion of two rounds of water level measurements;
- completion of single well response tests on three monitoring wells;
- completion of a water well survey for the area surrounding the Site; and
- collection of information regarding underground utilities surrounding the Site.

The specific investigative activities detailed above were completed in accordance with the March 20, 2007 Groundwater Investigation Work Plan. The Illinois EPA approved the Work Plan in a letter dated April 16, 2007.

3.1 PHASE 1 - SCOPE OF WORK

The Illinois EPA's field activities included screening soils and collecting soil samples on the H. Kramer Site and the immediate vicinity in June 2005. Illinois EPA's sampling also included locations in the community away from the H. Kramer Site that are not included in this report.

3.1.1 PHASE 1 - ON-SITE INVESTIGATIONS

On-Site Soil Screening Activities

The Illinois EPA selected 13 locations on-Site and one location adjacent to the Site (see Figure 2). One of these locations was soil on top of a concrete drive near the bag house (XRF-73), and one location (XRF-80) consisted of residual sediments within an old flue pipe stage in the southern portion of the open lot.

The soils/gravel base at each of these locations (XRF-68 through XRF-92) were screened by Illinois EPA for the presence of heavy metals using a Niton 700 Series X-ray Florescence Detector (XRF), model XL 722S. XRF analyzers determine the chemistry of a sample by measuring the spectrum of the characteristic x-rays emitted by the different elements in the sample when it is illuminated by high-energy photons (x-rays or gamma rays).

Details regarding the Illinois EPA's XRF setup are as follows:

XRF detector type:	Niton 700 Series X-ray Florescence Detector, model XL 722S
IEPA on-Site Representatives:	Kenneth Corkill and Lance Range

At each of the XRF screening locations, a thin layer of loose surface material was scrapped away using a trowel. The detector was then laid down onto the ground surface and an XRF reading was recorded. At several of the locations, soils at depth were also screened. This was accomplished by digging a hole with the trowel, or a shovel if needed, to the desired depth. A representative sample from the target interval was then placed (mounded) onto the ground surface next to the hole. The detector was placed on this mound of soil and an XRF reading was recorded. During the investigation, the Illinois EPA only physically recorded the XRF readings for lead and zinc.

Each of the locations screened by the Illinois EPA consisted of compacted gravel base material, which had been placed by H. Kramer in the open lot to support movement of trucks and other related equipment associated with the operation of the foundry, and are not representative of subsurface soil conditions.

Appendix A provides a figure illustrating the XRF screening locations and a table summarizing the Illinois EPA's XRF readings.

On-Site Soil Sampling

After reviewing the XRF results, the Illinois EPA returned to six of the screening locations to collect soil samples. The locations where soil samples were collected are shown on Figure 2. Table 1 summarizes the Illinois EPA's XRF screening lead concentrations and the samples they selected for laboratory analysis. Sampling intervals ranged from 0 to 2 inches to 4 to 6 inches below grade. Table 2 provides a summary of the split soil samples collected by CRA.

Samples were collected from the same holes that the XRF screening was conducted. Samples were collected using a pre-cleaned stainless steel trowel. Soil was then placed directly into sample jars. Once the Illinois EPA was finished collecting their sample, CRA followed by collecting a split sample from the same interval. Each of the Illinois EPA sample locations consisted of compacted gravel base material.

The Illinois EPA analyzed the collected samples for target analyte list (TAL) metals and for toxicity characteristic leaching procedure (TCLP) metals. CRA had all of the split samples analyzed for TAL metals.

3.1.2 PHASE 1 - OFF-SITE INVESTIGATIONS

Off-Site Soil Screening Activities

The Illinois EPA conducted off-Site XRF screening of soils in areas surrounding the Site on June 13 and 15, 2005. CRA was not present during the off-Site XRF screening activities conducted by the Illinois EPA (see Appendix A for the off-Site XRF screening results).

Off -Site Soil Sampling

Based on the results of the off-Site XRF screening data (collected on June 13, 2005), the Illinois EPA returned to ten of the previous off-Site XRF screening locations to collect surficial soil samples. Table 1 summarizes the Illinois EPA's XRF screening lead concentrations for the H. Kramer Site and the samples they selected for laboratory analysis. Table 2 provides a summary of sampling information for split soil samples collected by CRA.

Samples were collected using a pre-cleaned stainless steel trowel. Soil was then placed directly into sample jars. Once the Illinois EPA was finished collecting their sample, CRA followed by collecting a split sample from the same location. The Illinois EPA's sampling intervals varied from location to location. Their sampling intervals ranged from the 0 to 1-inch to the 0 to 4-inch interval. CRA remained consistent with the depths of the split sample intervals at 0 to 4 inches at each off-Site sampling location.

The Illinois EPA analyzed the collected samples for TAL metals and for TCLP metals. CRA had all of the split samples analyzed for TAL metals and archived the samples for possible TCLP metal analysis.

3.2 PHASE 2 - SCOPE OF WORK

The Phase 2 soil investigative activities were conducted to further evaluate soils on the Site with respect to the vertical distribution of metals and to evaluate area background concentrations in surficial soils within the Pilsen area of Chicago. Field activities associated with the Phase 2 investigation were conducted on July 7 and 8, 2005.

Field procedures followed during the Phase 2 investigation are provided in Appendix B.

3.2.1 PHASE 2

The objective of the Phase 2 on-Site soil investigation was to determine the horizontal and vertical distribution of metals in soils within the open areas of the Site. Soil samples were collected from 17 soil borings. Figure 3 illustrates the soil boring locations. Five of the soil boring locations (GP-11, GP-13, GP-15, GP-16, and GP-17) were advanced adjacent to the soil sampling locations sampled by the Illinois EPA during the Phase 1 investigation.

Soil samples were collected through the advancement of shallow soil borings advanced using direct push technology (DPT) methods. Soil borings were advanced to a depth of approximately 8 feet below ground surface (ft bgs). Two of the soil borings (GP-1 and GP-11) were advanced to a depth of 12 feet to obtain additional stratigraphic information. Soil samples were collected using DPT such as a Geoprobe™ rig. CRA retained Paramount Environmental Services of Portage, Indiana (Paramount) to provide DPT drilling services. Stratigraphic logs for the soil borings are provided in Appendix C.

Representative soil samples from the 0.0 - 0.5 (surficial gravel/soil), 2 - 3 (soil beneath gravel), and 5 – 6 (fill and/or native soil) foot intervals (approximately) were retained for laboratory analysis.

One soil sample was collected by hand at location GP-17. This location was also a location sampled during Phase 1. A hand shovel was used to dig a hole to a depth of 1 foot. A pre-cleaned trowel was then used to collect the soil sample at this location.

Soil samples were analyzed for priority pollutant metals using United States Environmental Protection Agency (U.S. EPA) method SW-846 6000/7000. Table 3 provides a summary of the soil samples collected during Phase 2.

A licensed surveyor from Bollinger, Lach & Associates of Oakbrook, Illinois was retained to survey the soil boring locations.

3.3 PHASE 3 - SCOPE OF WORK

The Phase 3 soil investigative activities were completed in the southwest parking lot to determine the horizontal and vertical distribution of lead in soils within this parcel of land, which historically contained a smelting facility. Field activities associated with the Phase 3 investigation were conducted on January 10, 2006.

Field procedures followed during the Phase 3 investigation are provided in Appendix B.

3.3.1 PHASE 3 - SOIL SAMPLING

On January 10, 2006, CRA completed soil borings at the Site in the southwest parking lot area. DPT drilling services were performed by RDnP Drilling Services of Crown Point, Indiana (RDnP). The approximate soil boring locations are identified on Figure 4. The soil borings logs are provided as Appendix C. The methods used for completion of soil borings and subsequent collection of soil samples were generally consistent with the methods detailed in the CRA Work Plan for Additional Soil Sampling sent to the Illinois EPA on October 14, 2005. A total of four soil borings (GP-18, GP-19, GP-20, and GP-21) were completed to depths ranging from approximately 7.0 to 7.5 feet below ground surface (bgs). Several additional test borings were advanced adjacent to these borings due to the amount of building rubble encountered and the resulting poor sample recovery. However, sample recovery in the additional test borings was also very poor.

CRA collected a total of ten soil samples including one duplicate soil sample from the four soil borings. The objective was to collect three representative soil samples from each of the soil borings (0.0 - 0.5′ (surficial gravel/soil), 2′ - 3′ (soil beneath gravel), and 5′ - 6′(fill and/or native soil). However, due to the amount of building debris encountered and DPT refusal, only one soil boring, GP-20, was advanced and sampled at the deeper interval. DPT refusal was encountered at a depth of 7.0 feet below grade in three of the soil borings (GP-18, GP-19, and GP-21). It is believed that this refusal represents the basement floor of the former building. Table 4 provides a summary of the samples collected for analysis.

3.4 PHASE 4 - SCOPE OF WORK

The fourth phase (Phase 4) was conducted in response to a request from the Illinois EPA to perform a groundwater investigation. The groundwater investigation focused on characterizing the perched water-bearing unit identified beneath the Site at a depth of approximately 6 feet below grade. This shallow water-bearing unit extends to a depth of 10 feet below grade. Below 10 feet there is tight gray clay till unit. Activities associated with the groundwater investigation were conducted in May and June 2007.

Field procedures followed during the Phase 3 investigation are provided in Appendix D.

3.4.1 PHASE 4 – GROUNDWATER INVESTIGATION

In May 2007, five monitoring wells were installed at the locations shown on Figure 5. The monitoring wells were installed to characterize the groundwater quality and flow conditions beneath the Site. During the installation of the monitoring wells soil samples were collected for pH and total organic carbon analysis. Table 5 provides a summary of the soil samples collected. Monitoring well stratigraphic and instrumentation logs are provided in Appendix C. Paramount performed the drilling services. The location and elevation of the newly installed monitoring wells were surveyed by an Illinois Licensed Surveyor.

Following installation the newly installed monitoring wells were developed. The well development was conducted by surging and pumping the wells. A minimum of 15 well volumes were removed during well development. Table 6 provides a summary of field parameters measured during development.

The monitoring wells were sampled a minimum of 10 days after development. Groundwater samples were collected using low flow/minimal drawdown purging techniques. Table 7 provides a summary of field parameters measured during purging. The collected groundwater samples were analyzed for total lead. Table 5 provides a summary of the groundwater samples collected.

Single well response tests were performed on monitoring wells MW-1, MW-2, MW-3, and MW-4. Single well response tests were completed to determine the hydraulic conductivity of the perched water-bearing unit.

As part of the groundwater investigation CRA completed a water well survey for the area surrounding the Site. This survey was conducted to identify any water wells which may be present near the Site. In addition, CRA collected information regarding underground utilities surrounding the Site. This information was obtained to determine if any of these utilities could influence groundwater flow beneath the Site.

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4.0 SITE SETTING

4.1 REGIONAL GEOLOGY

Information regarding the Site geology is based upon observations during drilling activities and published information. The topography of the Site and the surrounding area is relatively flat. The elevation of the Site based on the Englewood, Illinois Quadrangle map (see Figure 1) is approximately 590 feet above mean sea level. The Site is located within the Chicago Lake Plain physiographic division, which was the bottom of glacial Lake Chicago. This area is characteristically flat.

Figure 6 illustrates the location of the Site on a map illustrating the surfical Geology of the Chicago Area.[1] This map indicates that the Carmi Member of the Equality Formation underlies the site. This Formation is a fine grained quiet lake-bottom deposit containing mostly silt and clay with localized sand lenses near beaches. The Site is located in an area classified as D2 in the Berg Circular (see Figure 7).[2] Areas designated as D2 are described as uniform, relatively impermeable silty or clayey glacial till or other fine-grained materials at least 20 feet thick with no evidence of interbedded sand and gravel.[3] Areas designated as D in the Berg Circular represent geologic sequences with the lowest potential for contaminating aquifers.

4.2 SITE GEOLOGY

Stratigraphic logs from CRA's investigations are provided in Appendix C. These stratigraphic logs indicate that a fill layer consisting of gravel, silt, and varying amounts of debris (brick, coal, glass, rubber, wood, etc.) extends from the surface to a depths ranging from 3.5 to greater than 6 feet bgs. Underlying the fill is a fine grained sandy silt layer that extends to a depth of approximately 10 feet bgs. Underlying the fill layer and the sandy silt layer is a clay layer that extends to the maximum depth investigated, 12 feet bgs.

Soil classification from this investigation indicate the Site is underlain with silts and clay with occasional thin sand seams. These observations are consisted with those of the reference geologic maps and literature.

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[1] Surficial Geology of the Chicago Region, Illinois State Geological Survey, Circular 460, 1970.

[2] *Potential for Contamination of Shallow Aquifers in Illinois*, Illinois State Geological Survey, Circular 532, 1984.

[3] IBID., page 27.

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The Site is located in an area that has been heavily industrial for over 100 years. In recognition of this fact, the City of Chicago enacted an ordinance prohibiting the use of groundwater in the area. The City of Chicago's groundwater ordinance eliminates the ingestion of groundwater beneath from the Site. The entire City of Chicago obtains drinking water from Lake Michigan. Moreover, soil analytical results at the Site have confirmed that the lead in the contaminated soil is not organic and is not mobile, and that lead concentrations decrease rapidly with depth, indicating lead has not migrated to groundwater beneath the Site. As such, the groundwater ordinance and the soil stratigraphy beneath the Site demonstrate that a groundwater ingestion exposure route does not exist.

4.3 SITE HYDROGEOLOGY

Depth to groundwater was measured on June 1, 2007 during the groundwater sampling event and again on June 29, 2007 during the single well response testing event. These depth to groundwater measurements and the surveyed well elevations were used to calculate the groundwater elevation measurements summarized in Table 8. This groundwater elevation data was used to develop the groundwater contour maps illustrated on Figures 8 and 9 for the June 1 and 29, 2007 monitoring events, respectively. Both of these figures illustrate a generalized southwesterly groundwater flow direction. The water table beneath the Site is relatively flat with a horizontal hydraulic gradient across the Site between monitoring wells MW-4 and MW-1 during both monitoring events of 0.004 feet per foot (ft/ft).

Single well response tests were performed on monitoring wells MW-1, MW-2, and MW-3, and MW-4. The results from the response tests are summarized in Table 9, and the computer generated graphs from the response test evaluation are provided in Appendix E. The hydraulic conductivity geometric mean from the four tests was calculated at 9.58×10^{-5} centimeters per second (cm/sec).

4.4 WATER WELL SURVEY

The Site is located within the City of Chicago, Illinois. CRA conducted a search for all water wells located within 1 mile of the Site. Data on public and private water wells was gathered from the following public sources:

- Illinois State Water Survey (ISWS) Well Database (non-municipal wells) and Illinois Water Inventory Program (IWIP) Database (municipal and commercial wells);
- Illinois State Geological Survey (ISGS) QuESToR Database;
- Illinois EPA Source Water Assessment Program (SWAP) online Database; and
- Cook County Department of Public Health.

Table 10 presents a summary of the water well information gathered from the various water well databases[4] and Figure 10 presents the general locations of the water wells listed in Table 10 in which sufficient information exists to determine the general locations of the wells. CRA confirmed that any information stored at the Cook County Department of Public Health is also contained in either the ISWS, ISGS, or Illinois EPA databases.

Water well survey data is provided in Appendix F.

4.4.1 COMMUNITY SUPPLY

The City of Chicago's water supply is obtained from Lake Michigan. The City currently has a groundwater use ordinance (Section 11-8-390 of the Chicago Municipal Code) in effect that has been approved by the Illinois EPA for use as an environmental institutional control (Division of Legal Counsel Ref # 97070701).

No community water supply wells were listed in any of the databases.

4.4.2 INDUSTRIAL/COMMERCIAL USE

As presented in Table 10, a total of 36 listings for industrial/commercial water wells were present in the databases as being either located within 1 mile of the Site (10 wells) or sufficient information (the plot identifier) was not available to determine the general locations of the wells. The plot identifier was listed for only 10 of the 36 wells; the general locations of the other 26 wells could not be determined. However, the construction dates were listed for half of the 26 wells, and the dates are all prior to 1934, with many prior to 1912. Therefore, it is very likely that the wells do not currently exist.

[4] Water wells listed in the databases as being sealed are not listed on Table 10.

Of the 10 industrial/commercial water wells listed as being located within 1 mile of the Site, the construction date is listed for eight of the 10 wells, and the dates for six of these eight wells are prior to 1945. It is likely that the six wells do not currently exist. The status of one of the two wells in which the construction date was not provided is listed in the ISWS database as being 'unused' and, therefore, the well likely does not currently exist. The information listed for the remaining three industrial/commercial wells is provided below:

- ISWS ID 04026 is owned by White Eagle Brew Company and is 1,620 feet deep, but the construction date is not reported. The specified location of the well is approximately ½-mile northwest of the Site. The current status of the well is not known and no listing of this company currently exists in Chicago.
- ISWS ID 306626/ISGS ID 32532 is owned by Concrete Production Services, is 1,005 feet deep, and was constructed in 1998. The specified location of the well is approximately 0.63 mile east of the Site. The current status of the well is not known; however, it is believed that this well is used for the manufacturing of concrete and not potable use.
- ISWS ID 33818/ISGS ID 25628 is owned by Chicago Block Company, is 120 feet deep, and was constructed in 1977. The specified location of the well is approximately 1 mile southwest of the Site. The current status of the well is not known.

A total of five monitoring/test wells are listed in Table 10. All five of the wells are shallow, being 17 feet deep or less. The plot identifier was not listed for three of the monitoring wells and, therefore, the general locations of the three wells could not be determined. The other two monitoring wells are owned by the Coca-Cola Bottling Company and were installed in 1992. The specified locations of the wells are approximately 0.3 mile west of the Site. The current status of the monitoring wells is not known.

4.4.3 DOMESTIC USE

Two domestic use water wells are listed on Table 10. The plot identifier was not listed for either of the wells and, therefore, the general locations of the wells could not be determined. However, the construction dates of the wells are listed as 1899 and 1890. Based on the construction dates, it is likely that neither well currently exists.

4.4.4 SUMMARY

The City of Chicago obtains water from Lake Michigan for domestic use. Of the wells listed in the databases for which sufficient information is provided to determine the general locations of the wells, a total of 12 water wells were listed in the databases as being located within 1 mile of the Site. Two of the wells are shallow (17 feet deep or less) test/monitoring wells installed in 1992 at a location approximately 0.3 mile west of the Site. The other 10 water wells are listed as industrial/commercial wells. Based on the construction dates and comments listed in the databases, it is likely that seven of the 10 wells do not currently exist. The status of the other three wells are not known. The specified locations of the three wells are ½ mile northwest of the Site, 0.63 mile east of the Site, and 1 mile southwest of the Site.

4.5 UNDERGROUND UTILITIES

CRA obtain information from the Chicago Department of Transportation's Office of Underground Coordination on the underground utilities surrounding the Site. The information obtained included utility drawings of electrical, communication, natural gas, water, sanitary sewer, and storm water sewers in the area. The storm water sewer drawing (see Appendix G) identified that 1-foot diameter sewers are located along West 21st Street to the north of the Site and along South Throop Street, located to the east of the Site. These sewer lines likely only have an minor effect on groundwater flow beneath the Site. The drawing also identified that a 4-foot diameter sewer line runs down the center of South Loomis Street, which is located to the west of the Site, and flows in a southerly direction. Along Cermak Road, located to the south of the Site, the drawing shows a 2-foot diameter storm water sewer, which becomes a 4-foot diameter sewer to the west. The drawing also shows a 17-foot diameter sanitary sewer along Cermak Road. The large diameter sewer lines along South Loomis Street and Cermak Road suggests that these sewer lines intersect the sandy silt water-bearing layer identified at a depth of approximately 6 feet below grade. These larger diameter sewer lines are likely the local features controlling groundwater flow in the area of the Site. This assumption is supported by the southwesterly groundwater flow direction observed beneath the Site.

4.6 GROUNDWATER CLASSIFICATION

Based on an evaluation of the hydraulic data obtained from the investigations, groundwater beneath the Site can be classified as a "Class II General Resource Groundwater" in accordance with the Illinois 620 Groundwater Quality Standards[5].

The following data support this classification for the shallow overburden water-bearing unit:

- information identified on the stratigraphic logs (see Appendix C) indicates that the perched silt and sand water-bearing unit was encountered at depths ranging from 6.0 feet bgs to 8.5 feet bgs.
- the Site is not located within the minimum setback zone of a potable water supply well. In addition, the Site is located in the City of Chicago where an Illinois EPA approved ordinance exists prohibiting the use of groundwater for potable use;
- the majority of the geologic materials within the water-bearing unit consist of silt and fine grained sand which contain more than 12 percent fines (capable of passing through a No. 200 sieve);
- the shallow water-bearing unit is not within a sandstone or fractured carbonate stratigraphic unit; and
- the shallow water-bearing unit has a hydraulic conductivity of less than 1×10^{-4} cm/sec.

Based on information obtained from the Illinois Division of Public Water Supply, the Site is not located within an area designated by the State as Special Use Groundwater.

[5] Groundwater Quality Standards, 35 Illinois Administrative Code Part 620, Illinois Pollution Control Board, Final Order, November 7, 1991.

5.0 CRA ANALYTICAL RESULTS

Severn Trent Laboratories, Inc. (STL) of North Canton, Ohio was retained to provide analytical services during the investigations.

5.1 PHASE 1

The soil samples were analyzed for TAL and TCLP metals using U.S. EPA method SW-847 6000/7000 series. The laboratory analytical report provided by STL for the split soil samples collected by CRA during Phase 1 is provided in Appendix H. CRA's data validation memorandum is provided in Appendix I.

The Phase 1 soil analytical results are summarized in Table 11. Table 11 also compares the soil analytical data to the default Tier 1 industrial/commercial remediation objectives (ROs) listed in the Tiered Approach to Correction Action Objectives (TACO) as found in 35 IAC 742.

Based on a review of the total metals analytical data, three on-Site soil samples (WP-003, WP-004, and WP-006) and two off-Site samples (WP-010 and WP-013) were analyzed for metals using the TCLP methods. These TCLP analyses were performed to evaluate if the concentrations of metals in the ground at these sampling locations would be characteristically hazardous. The TCLP analytical results are summarized in Table 12. The concentration of lead and cadmium in the on-Site sample WP-003 and lead in the on-Site sample WP-006 exceeded the characteristically hazardous thresholds. None of the off-Site samples analyzed exceeded the thresholds.

Information from the Illinois EPA summarizing their sampling results is provided in Appendix J.

5.2 PHASE 2

The soil samples were analyzed for priority pollutant metals using U.S. EPA method SW-847 6000/7000 series. The laboratory analytical report provided by STL for the soil samples collected by CRA during Phase 2 are provided in Appendix K. CRA's data validation memorandum is provided in Appendix L.

The Phase 2 soil analytical results are summarized in Table 13. Table 13 also compares the soil analytical data to the default TACO Tier 1 industrial/commercial ROs, found in 35 IAC 742. Figures 11, 12, and 13 illustrate isoconcentration contours of lead

concentrations in soils from the 0.0 to 0.5, 0.5 to 3.5, and the 3.5 to 6.5 foot intervals, respectively.

5.3 PHASE 3

CRA collected a total of ten soil samples, including one duplicate soil sample, from the four soil borings. The soil samples were analyzed for total and TCLP lead using method EPA SW-846 6000. None of the analyte concentrations detected in the soil samples collected from soil borings GP-18, GP-19, and GP-20 exceeded the TACO Tier 1 industrial/commercial and construction worker RO of 800 and 700 milligrams per kilogram (mg/kg), respectively, for the ingestion exposure route. Lead was detected in both soil samples collected from soil boring GP-21 (WP-087 and WP-088) at concentrations of 8,590 and 2,140 mg/kg, which are above the corresponding Tier 1 RO. Soil sample WP-089 was a duplicate soil sample of WP-088 and Lead was detected in WP-089 at a concentration of 3,790 mg/kg.

None of the analyte concentrations detected in the soil samples collected from soil borings (GP-18, GP-19, and GP-20) exceeded the Characteristic Criteria for Lead of 5.0 milligrams per liter (mg/L). TCLP Lead was detected in the shallow surficial soil sample (WP-087) collected from soil boring GP-21 (0.3 to 0.6 feet) at a concentration of 181 mg/L, which is above the corresponding Characteristic Criteria for Lead of 5.0 mg/L. The underlying sample collected from soil boring GP-21 was well below the Characteristic Criteria for Lead, indicating the exceedence is only a surficial feature.

Figures 14 and 15 illustrate isoconcentration contours of lead concentrations in soil from the 0 to 0.5 and 0.5 to 3.5 foot intervals of the southwest parking lot, respectively.

A summary of the laboratory analytical data is included as Table 14. A copy of the laboratory data report is included as Appendix M and the data validation memorandum is provided in Appendix N.

5.4 PHASE 4

On May 1, 2007, groundwater samples were collected for total lead analyses from the five newly installed monitoring wells. Phase 4 soil analytical results are summarized in Table 15. Groundwater analytical results are summarized in Table 16 and illustrated on Figure 16. None of the total lead concentrations detected in groundwater exceeded the Class 2 groundwater standard of 0.1 mg/L. The highest lead concentration detected was

in monitoring well MW-5 (0.018 mg/L),which is approximately an order of magnitude lower than the Class 2 Groundwater Standard.

A copy of the laboratory data report is included as Appendix O.

6.0 ENDANGERMENT ASSESSMENT

This Section summarizes the results of the field activities and characterizes the extent of lead impacts at the Site. Based on the presented soil data, metals analytes consisting of lead, cadmium, antimony, arsenic, copper, and zinc have been detected at concentrations exceeding the industrial/commercial and/or construction worker ROs for ingestion and/or inhalation. However, the primary compound of concern is lead. The following endangerment assessment is therefore focused on lead.

6.1 SOIL ASSESSMENT

As the FSI is focused on lead as the contaminate of concern, the following has been identified.

- Lead has been detected in the surficial soils at the Site at concentrations that exceed the Tier 1 Soil Ingestion Remediation Objective for Industrial/Commercial Properties of 800 mg/kg and Construction Workers of 700 mg/L; and
- TCLP lead has been detected in the surficial soils at the Site at concentrations that exceed characteristically hazardous threshold of 5.0 mg/L.

6.2 GROUNDWATER ASSESSMENT

Results from the groundwater investigation have demonstrated that the lead concentrations in the groundwater beneath the Site are below the applicable the Class 2 groundwater standard. In addition, based on the collected water well information and the City's prohibitive ordinance the groundwater ingestion exposure route does not exist.

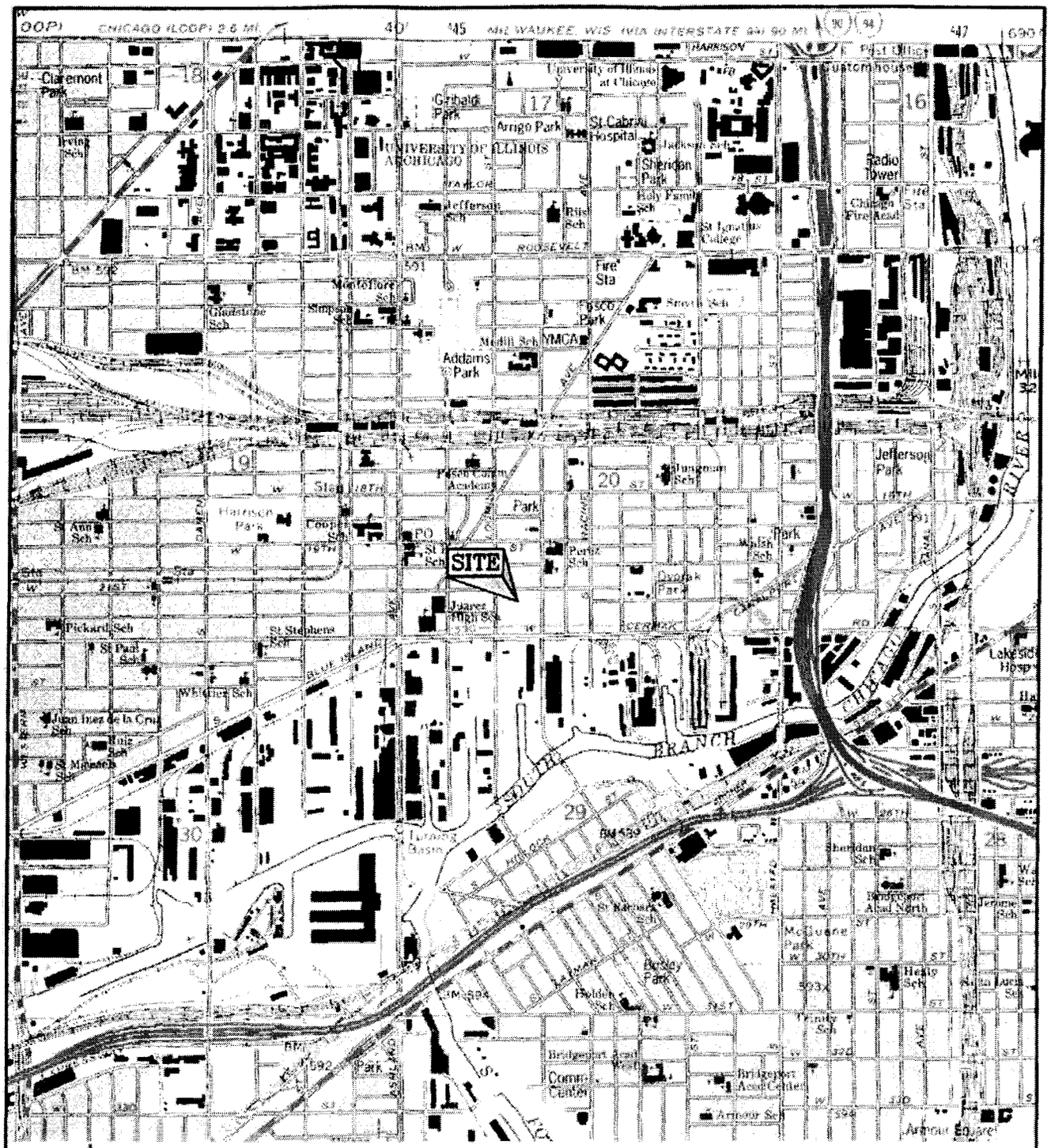
7.0 CONCLUSIONS

Based on the data presented the following conclusions are made:

- The FSI report provides extensive data that delineate the horizontal and vertical concentrations of lead in soil at the property. The data show that the lead is surficial and drops down to background levels in the native soil underlying the fill within 6 feet of ground surface (see Figure 17).
- The groundwater beneath the Site has not been impacted and no further studies are needed.
- Based on the collected water supply well inventory and the City ordinance, the groundwater ingestion exposure route does not exist.
- The lead impacts to the surficial soils have been adequately characterized to develop a remedy for the Site to address the primary exposure routes at the Site, which are the ingestion and inhalation routes.

Based on the collected data the recommended next step is to implement a remedial action to address the primary exposure routes at the Site, which are the ingestion and inhalation routes.

HK 01126



BASE SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC QUADRANGLE; ENGLEWOOD, ILLINOIS 1993

0 200 600ft

CHICAGO

ILLINOIS

figure 1

SITE LOCATION
H. KRAMER
Chicago, Illinois

39826-00(006)GN-CO003 SEP 19/2007

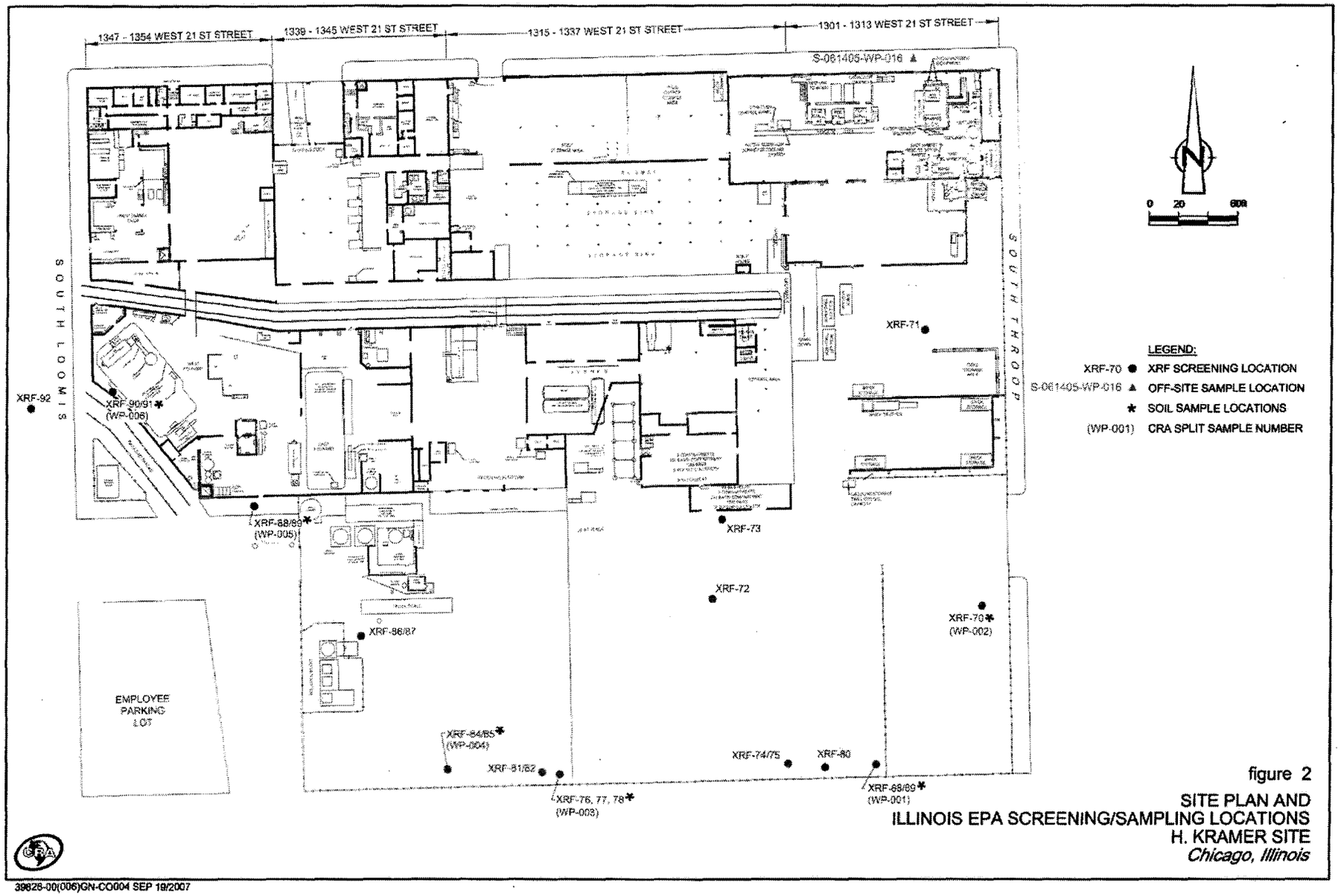


figure 2

SITE PLAN AND
ILLINOIS EPA SCREENING/SAMPLING LOCATIONS
H. KRAMER SITE
Chicago, Illinois

39828-00(006)GN-CO004 SEP 19/2007

HK 01128

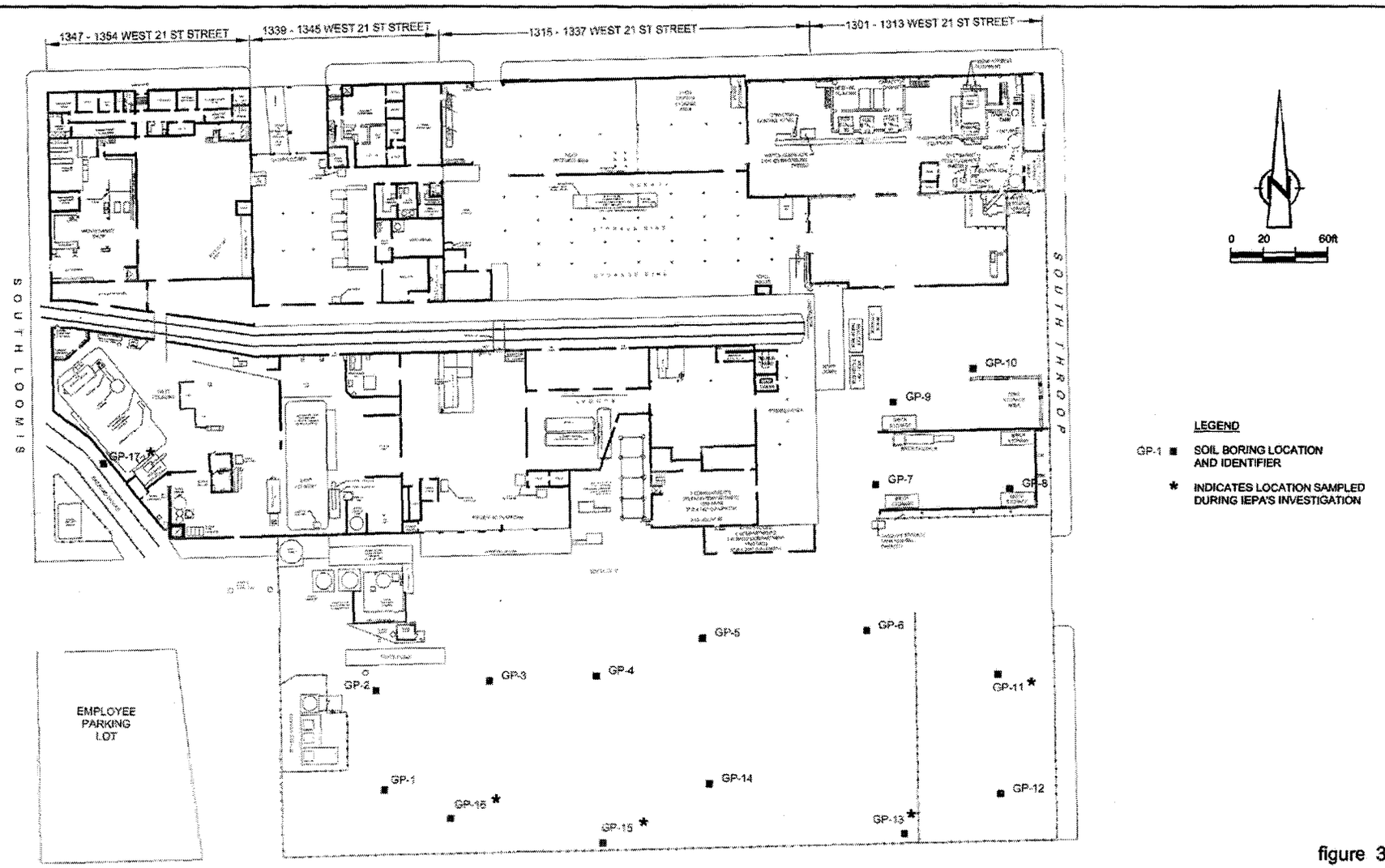
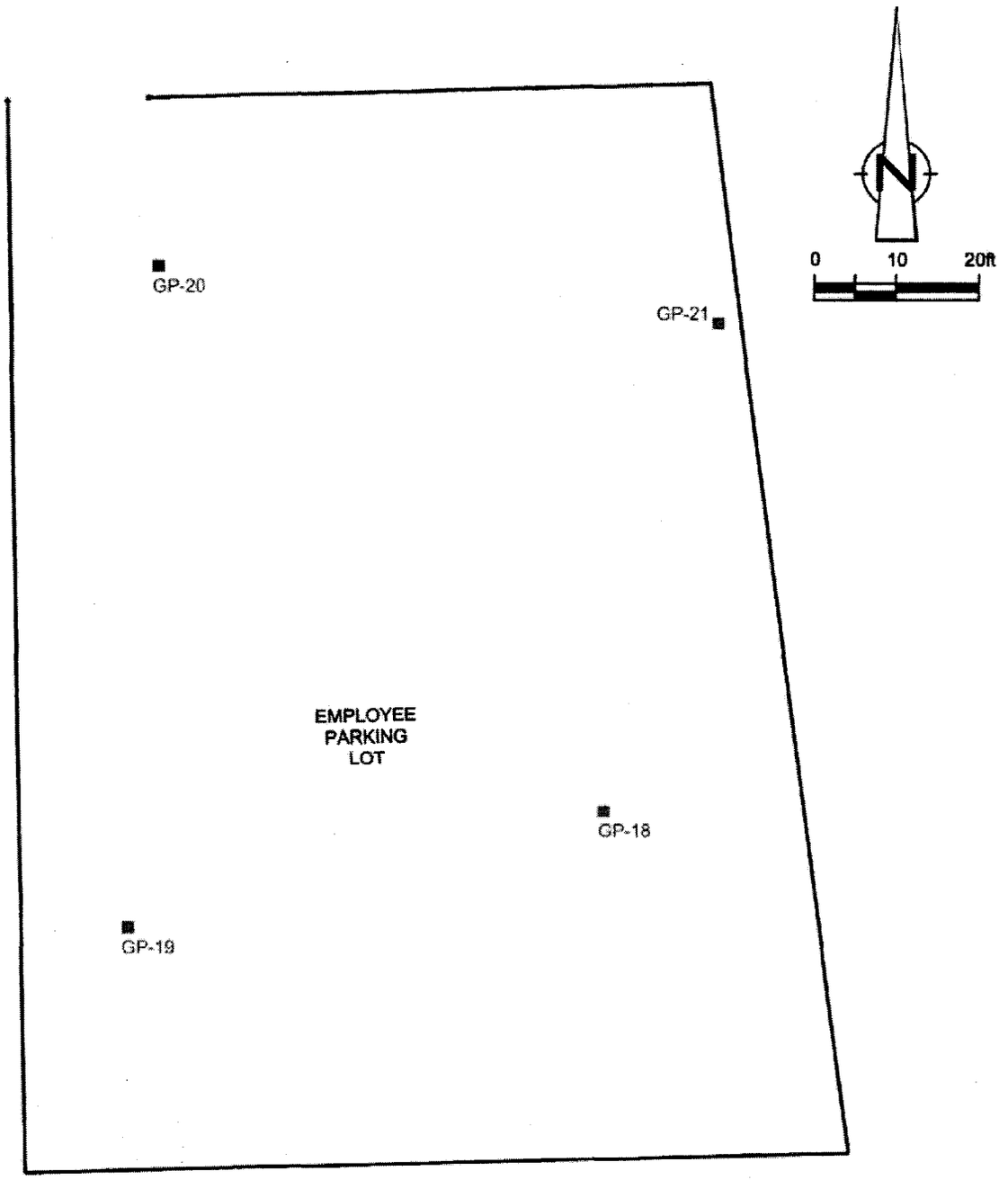


figure 3

PHASE 2 ON-SITE SOIL BORING LOCATIONS
H. KRAMER SITE
Chicago, Illinois

39826-00(006)GN-CO005 SEP 19/2007

HK 01129



LEGEND

GP-19 ■ SOIL BORING LOCATION AND IDENTIFIER

NOTE:

SEE FIGURE 2 FOR LOCATION OF PARKING LOT

figure 4

PHASE 3 SOIL BORING LOCATIONS
SOUTHWEST PARKING LOT AREA
H. KRAMER SITE
Chicago, Illinois

39826-00(006)GN-CO006 SEP 19/2007

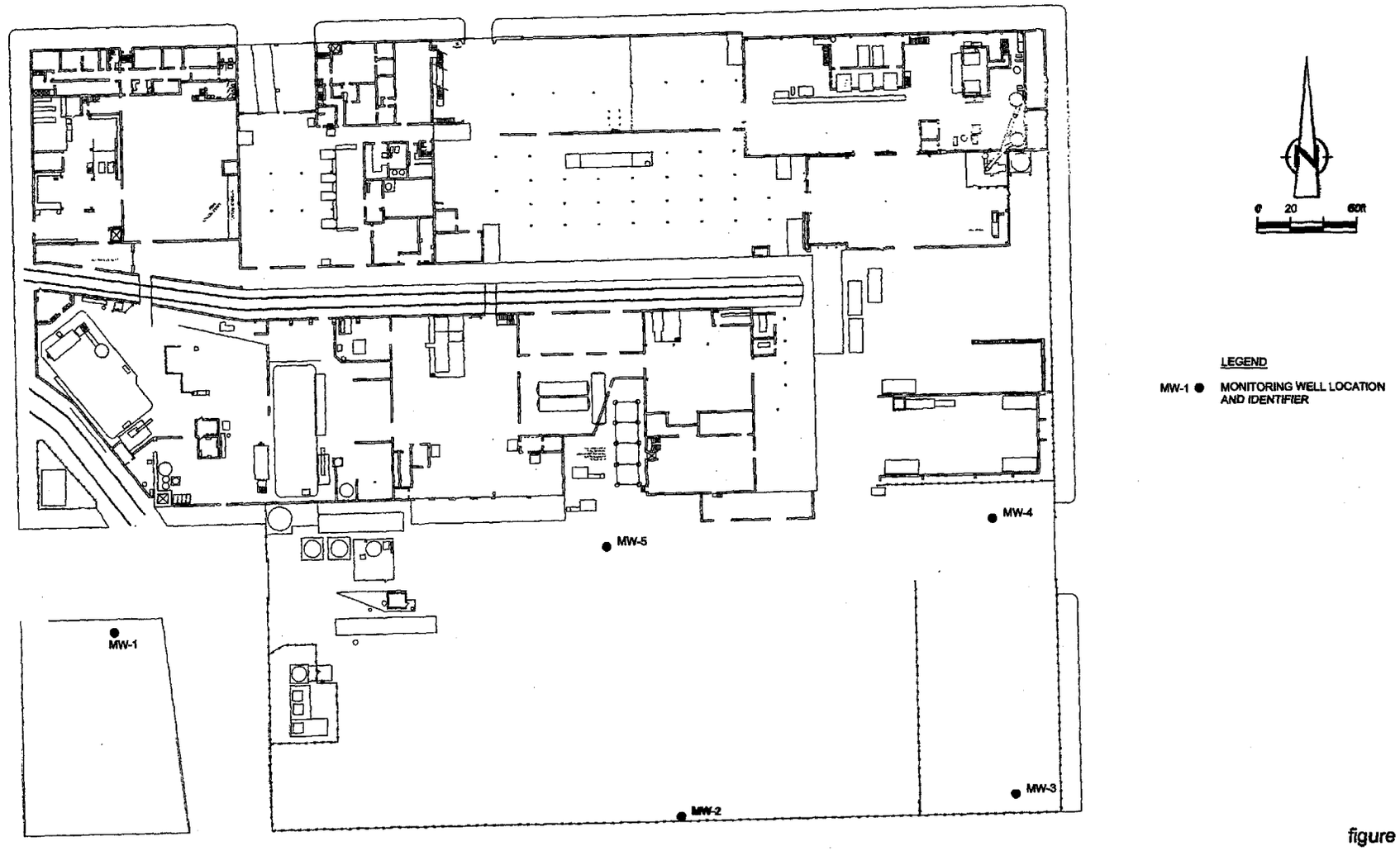
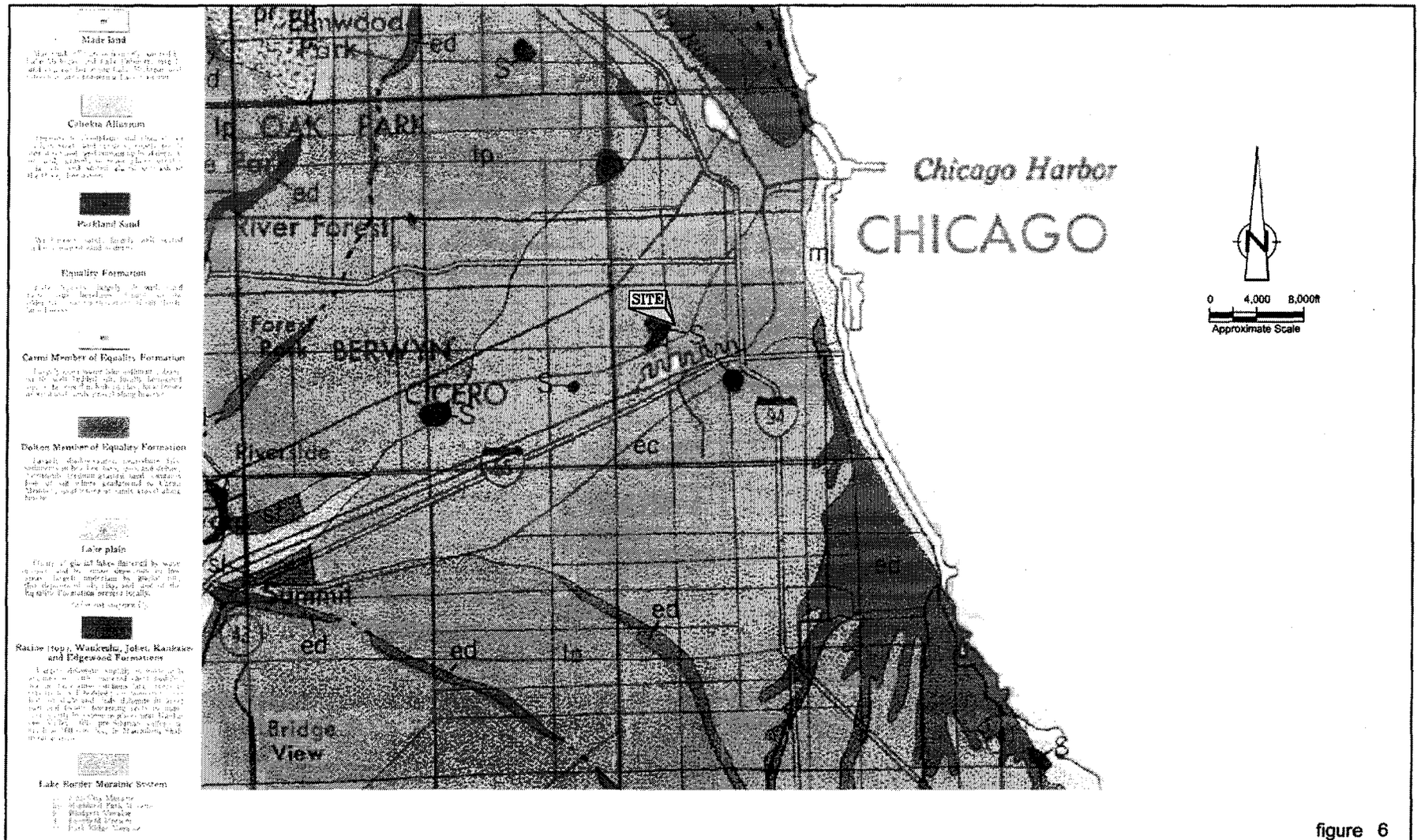


figure 5

MONITORING WELL LOCATIONS
H. KRAMER SITE
Chicago, Illinois

39826-00(006)GN-CO007 SEP 19/2007

HK 01131



SOURCE:

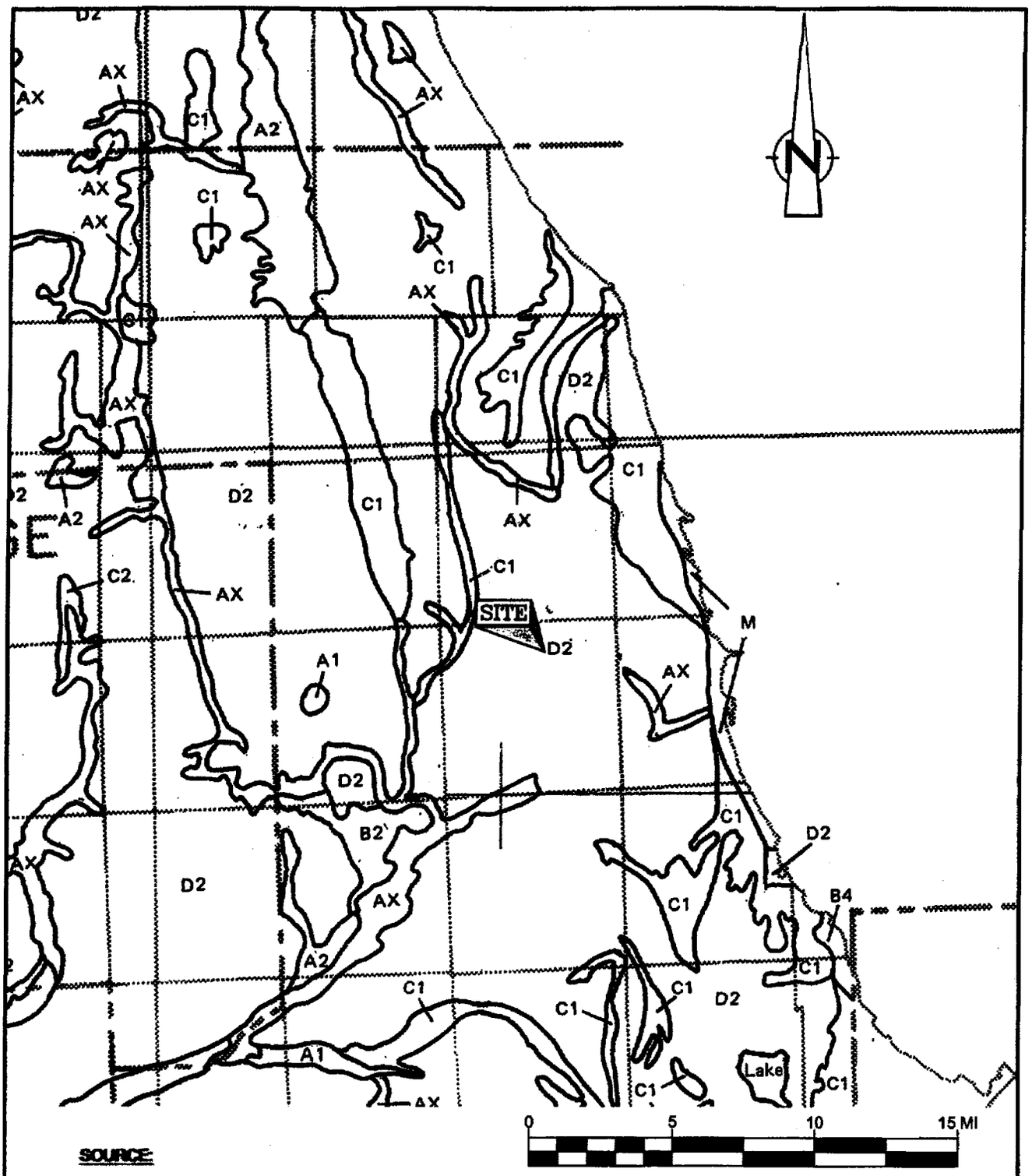
ILLINOIS STATE GEOLOGICAL SURVEY
JOHN C. FRYE, CHIEF
URBANA, ILLINOIS 61801

figure 6

SURFICIAL GEOLOGY OF THE CHICAGO REGION
H. KRAMER
Chicago, Illinois

39826-00(005)GN-C0008 SEP 19/2007

HK 01132



SOURCE:

ILLINOIS STATE GEOLOGICAL SURVEY
RICHARD C. BERG, JOHN P. KEMPTON, ROBERT C. VAIDEN AND AMY N. STECYK

figure 7

BERG CIRCULAR-SITE LOCATION
H. KRAMER
Chicago, Illinois

39826-00(006)GN-CO009 SEP 19/2007

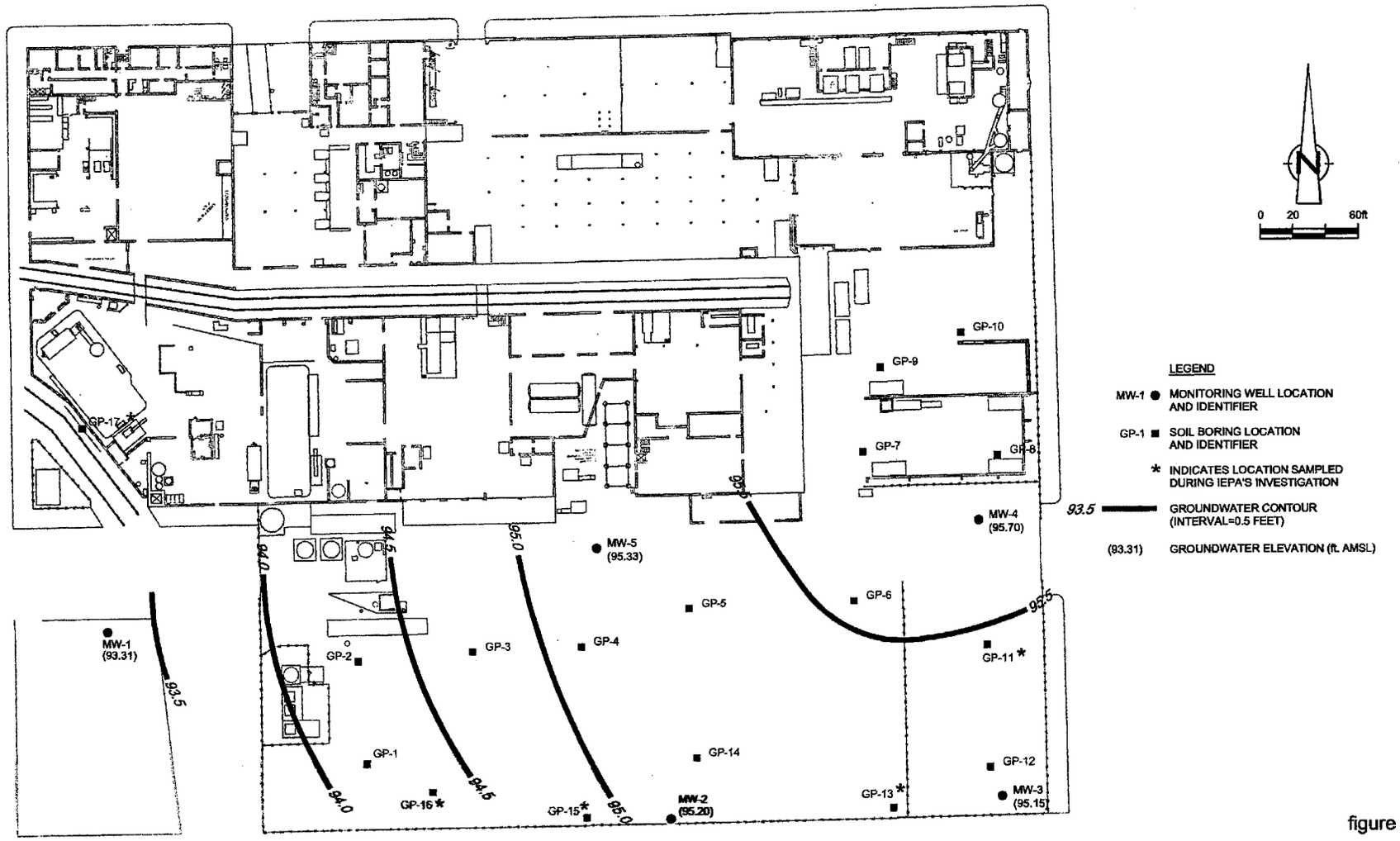


figure 8

GROUNDWATER CONTOURS
JUNE 1, 2007
H. KRAMER SITE
Chicago, Illinois

39826-00(006)GN-CO001 SEP 19/2007

HK 01134

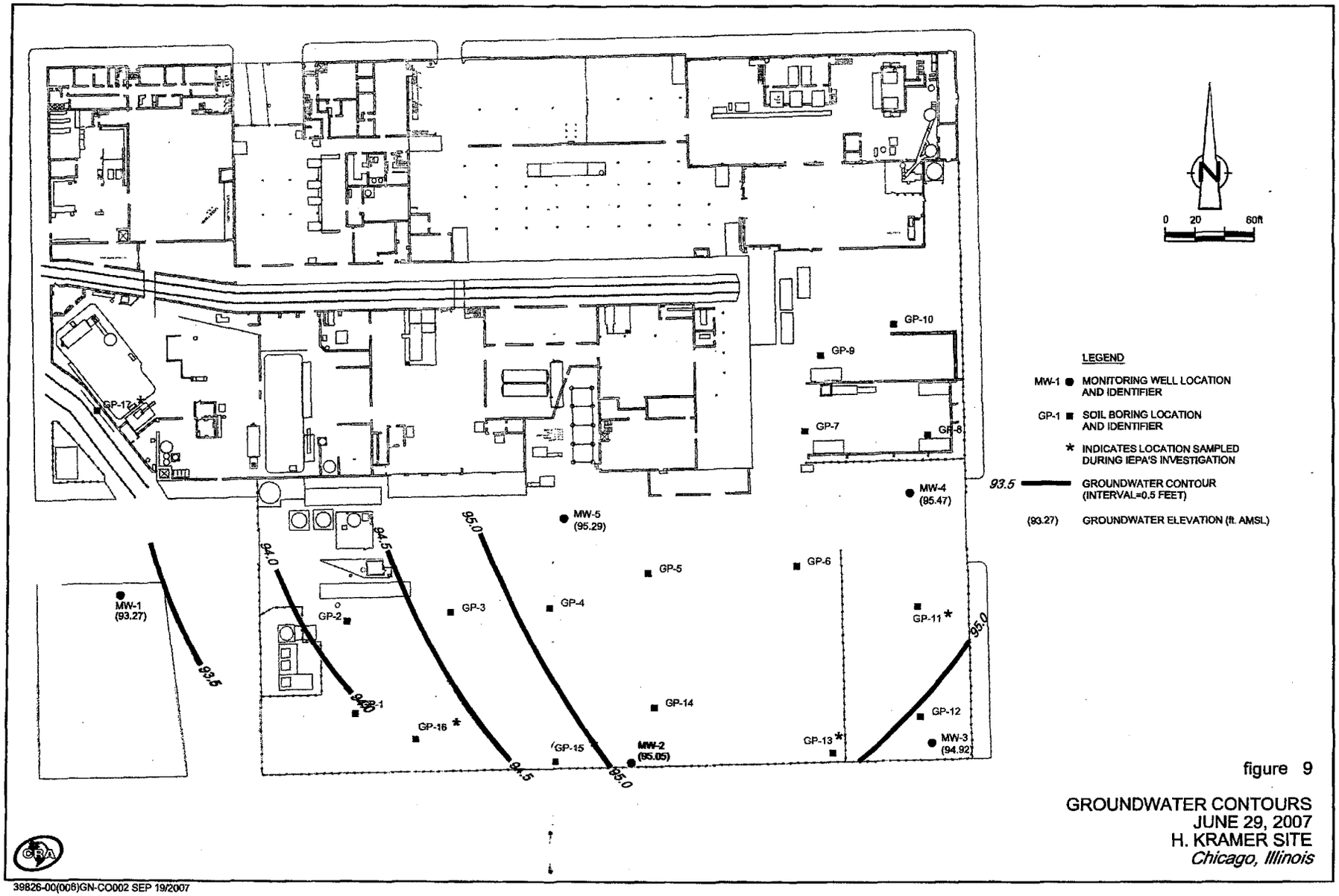


figure 9

GROUNDWATER CONTOURS
JUNE 29, 2007
H. KRAMER SITE
Chicago, Illinois

39826-00(008)GN-CO002 SEP 19/2007

HK 01135

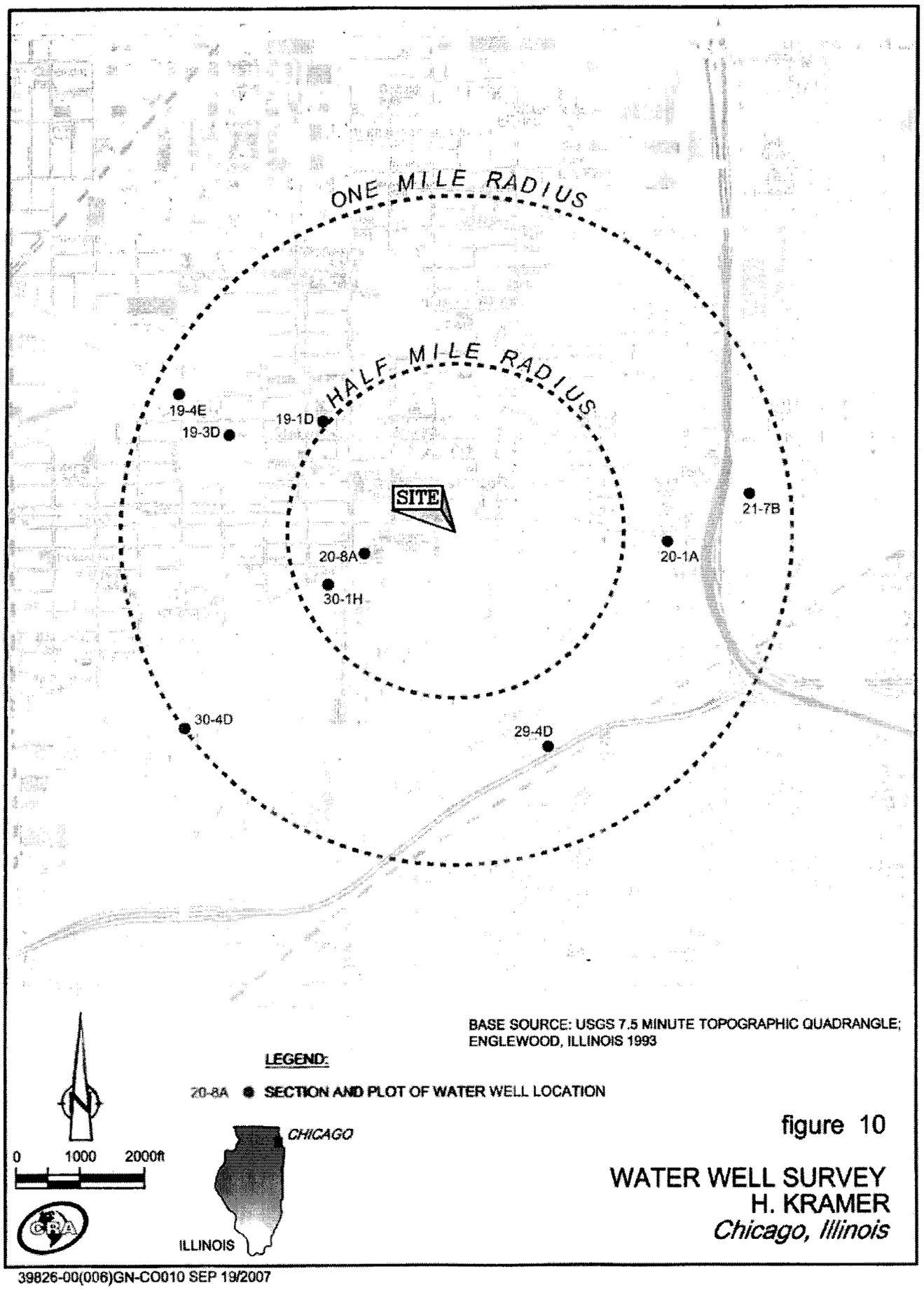


figure 10

WATER WELL SURVEY
H. KRAMER
Chicago, Illinois

39826-00(006)GN-CO010 SEP 19/2007

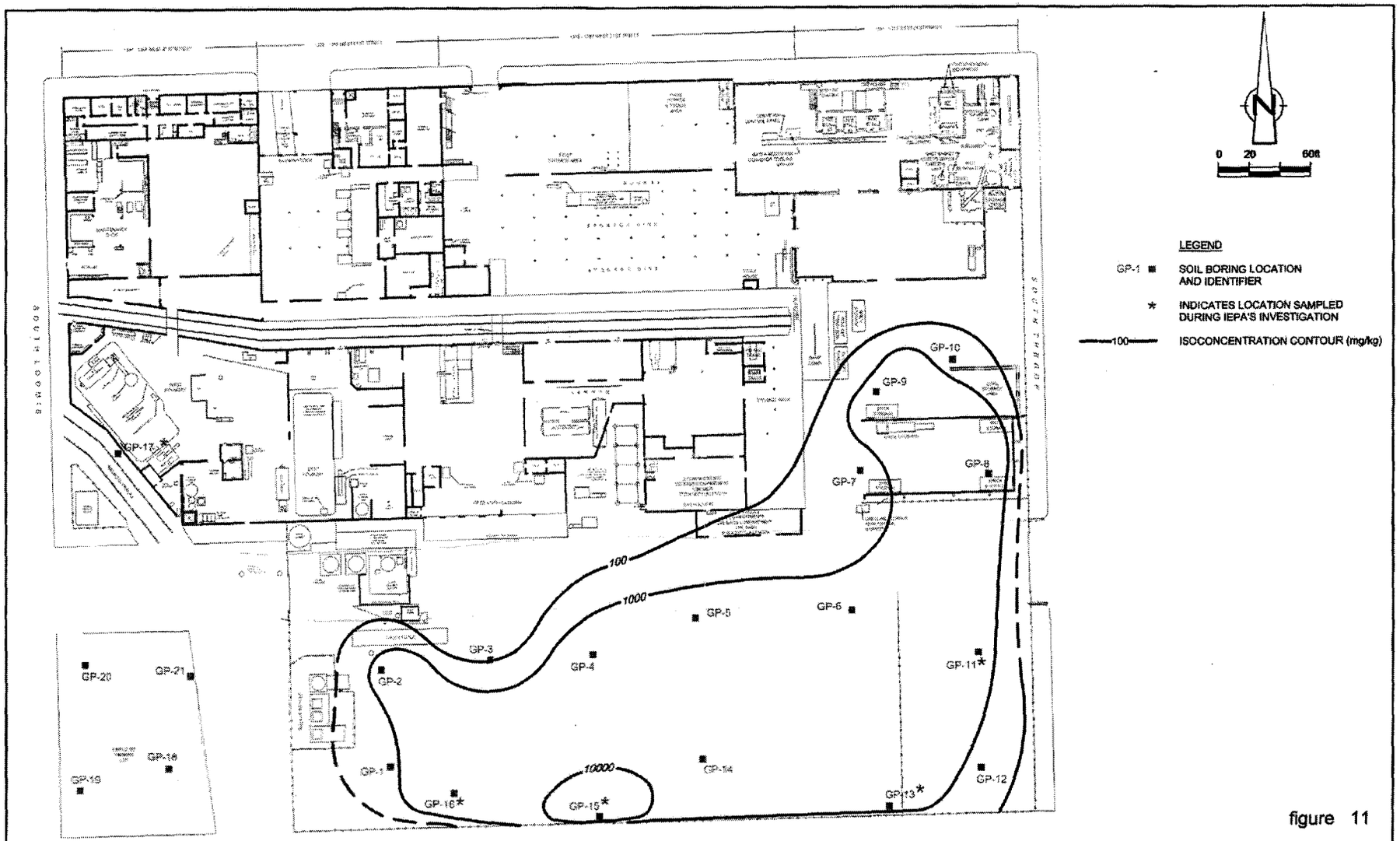


figure 11

LEAD ISOCONCENTRATION MAP - 0.0 to 0.5 FEET
H. KRAMER SITE
Chicago, Illinois

39826-00(006)GN-CO011 SEP 19/2007

HK 01137

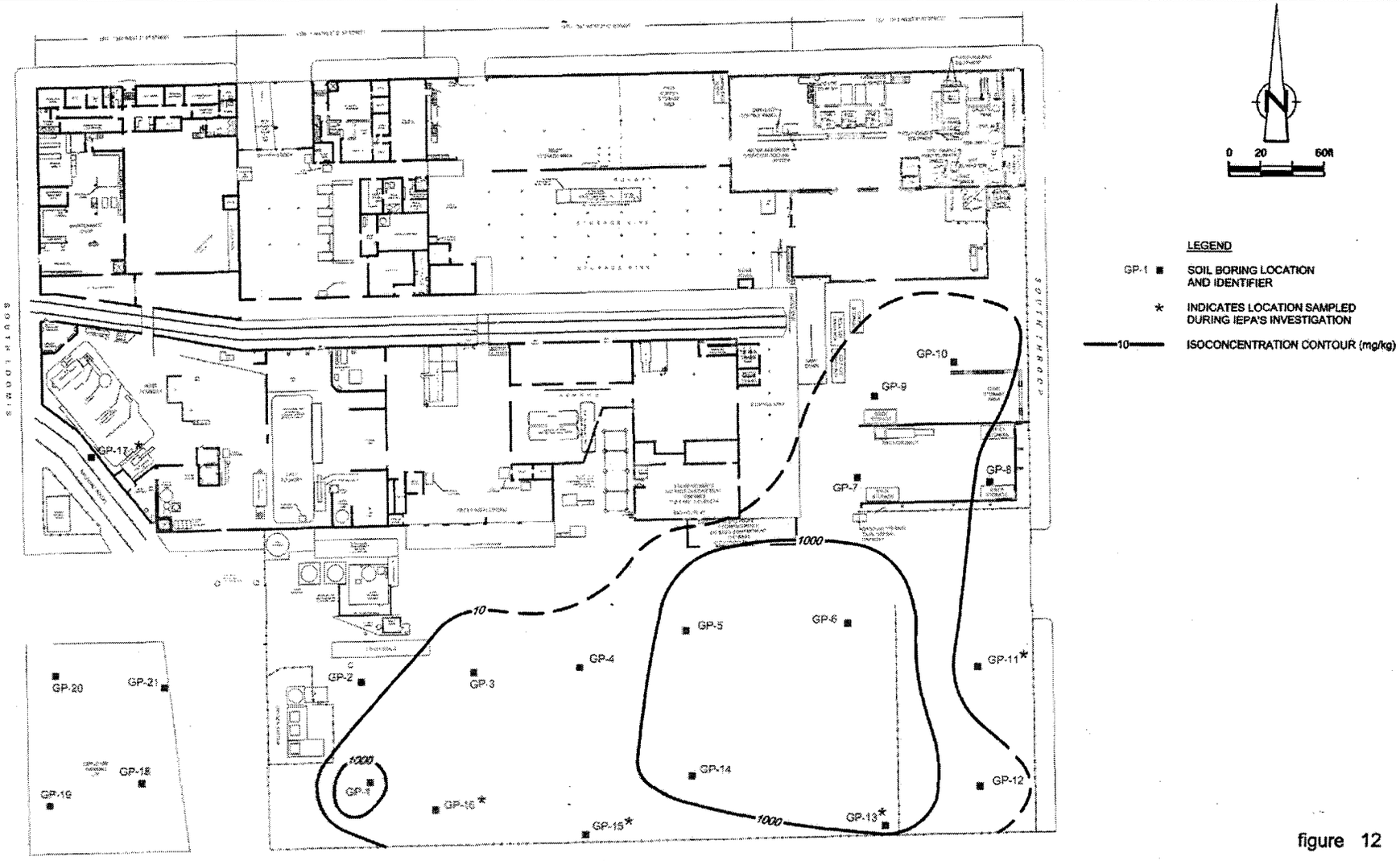


figure 12

LEAD ISOCONCENTRATION MAP - 0.5 to 3.5 FEET
H. KRAMER SITE
Chicago, Illinois

39826-00(006)GN-CO012 SEP 19/2007

HK 01138

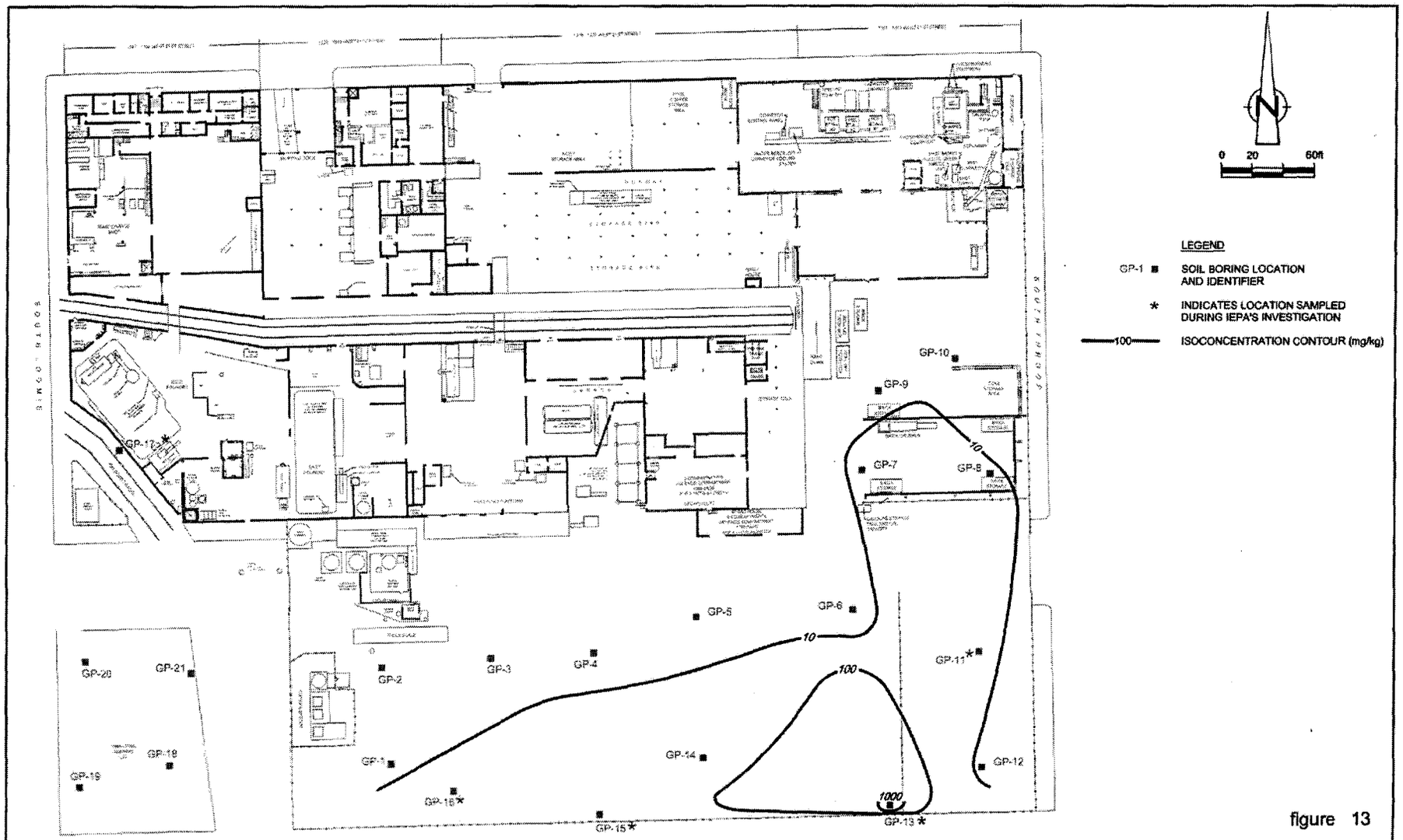
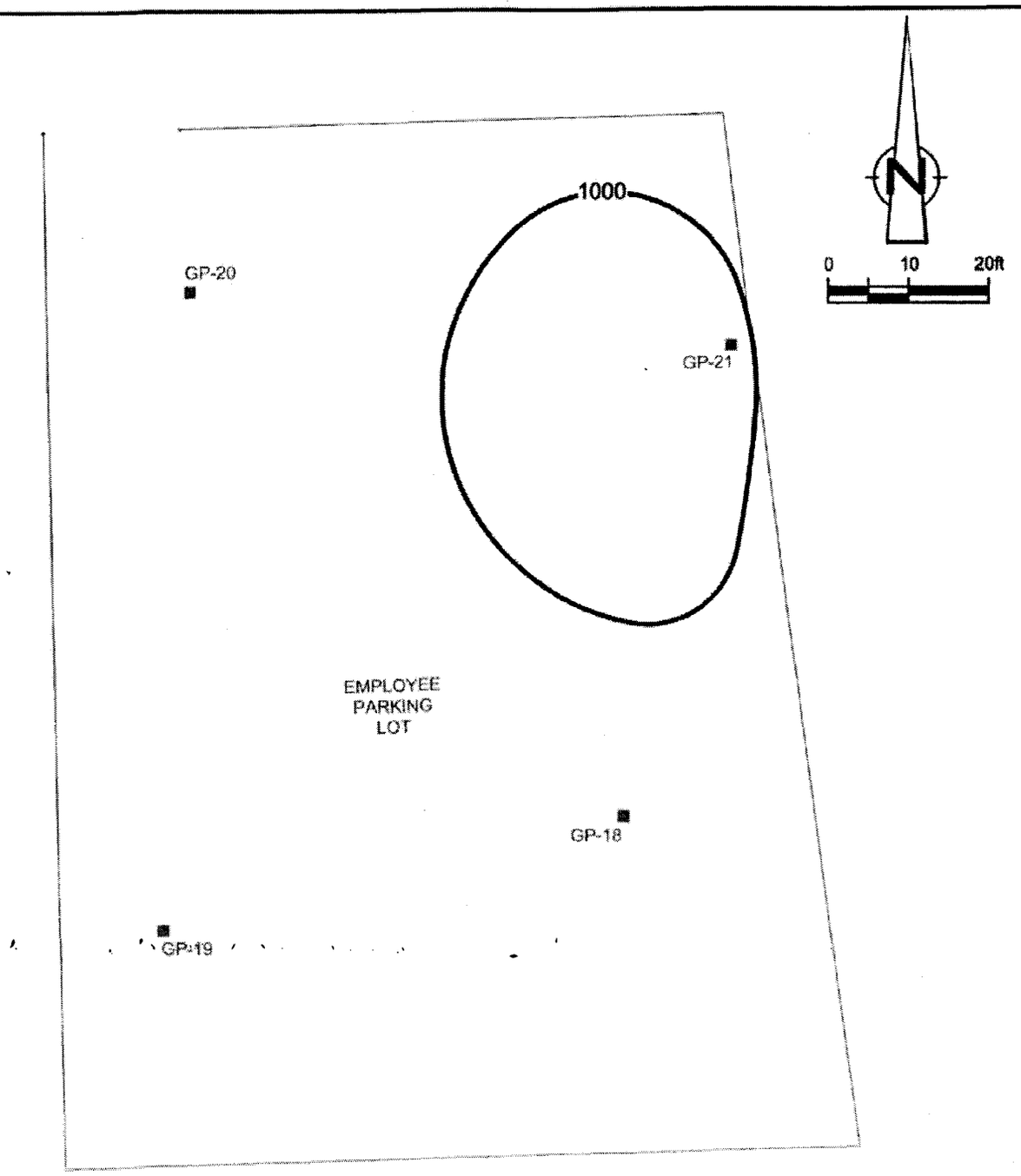


figure 13

LEAD ISOCONCENTRATION MAP - 3.5 to 6.5 FEET
H. KRAMER SITE
Chicago, Illinois

39826-00(008)GN-CO013 SEP 19/2007

HK 01139



LEGEND

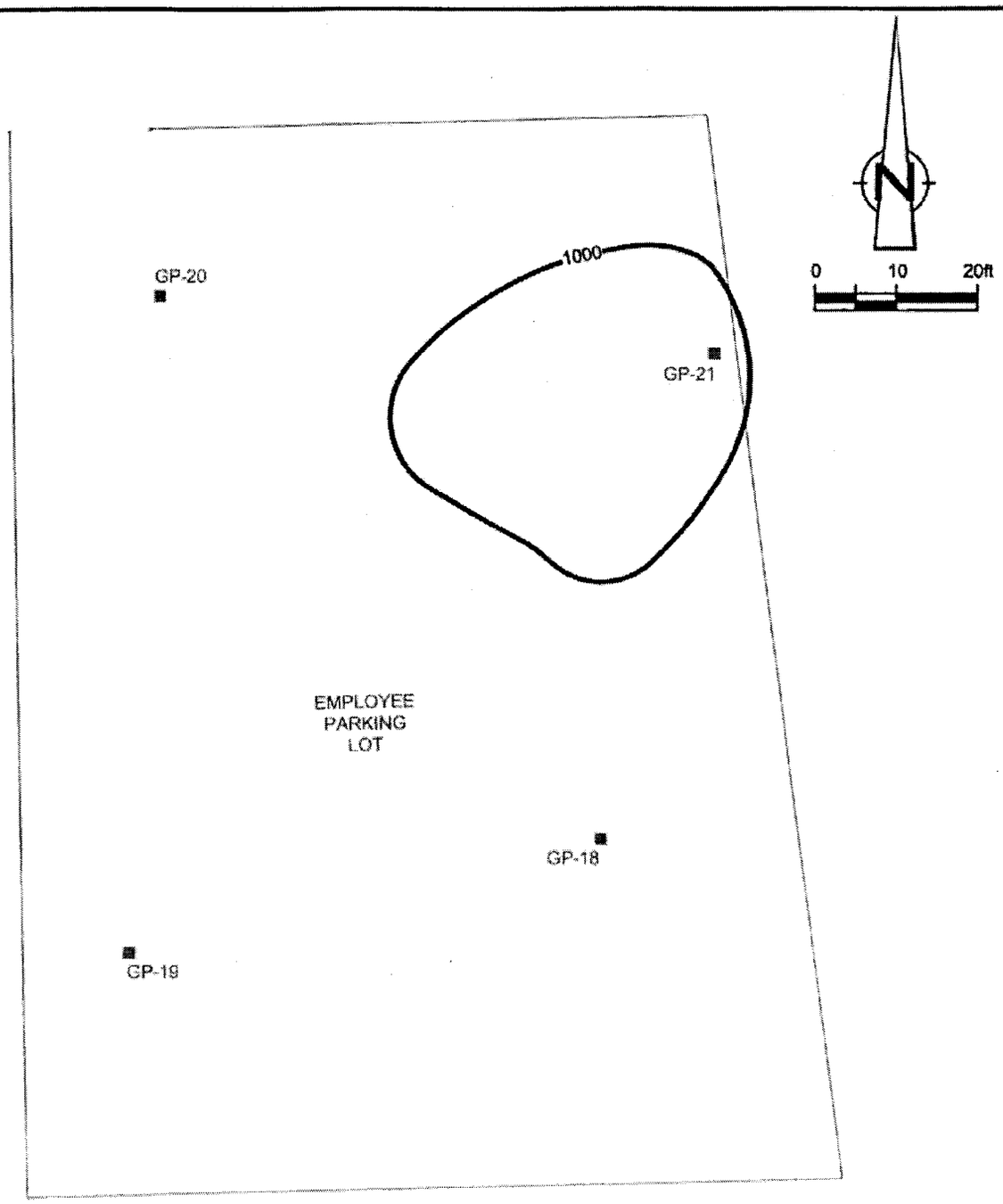
GP-1 ■ SOIL BORING LOCATION AND IDENTIFIER

—1000— ISOCONCENTRATION CONTOUR (mg/kg)

figure 14

ISOCONCENTRATIONS SOUTHWEST PARKING LOT - 0.0 to 0.5 FEET
H. KRAMER SITE
Chicago, Illinois

39826-00(006)GN-CO014 SEP 19/2007



LEGEND

GP-1 ■ SOIL BORING LOCATION AND IDENTIFIER

—1000— ISOCONCENTRATION CONTOUR (mg/kg)

figure 15

ISOCONCENTRATIONS SOUTHWEST PARKING LOT - 0.5 to 3.5 FEET
H. KRAMER SITE
Chicago, Illinois

39826-00(006)GN-CO015 SEP 19/2007

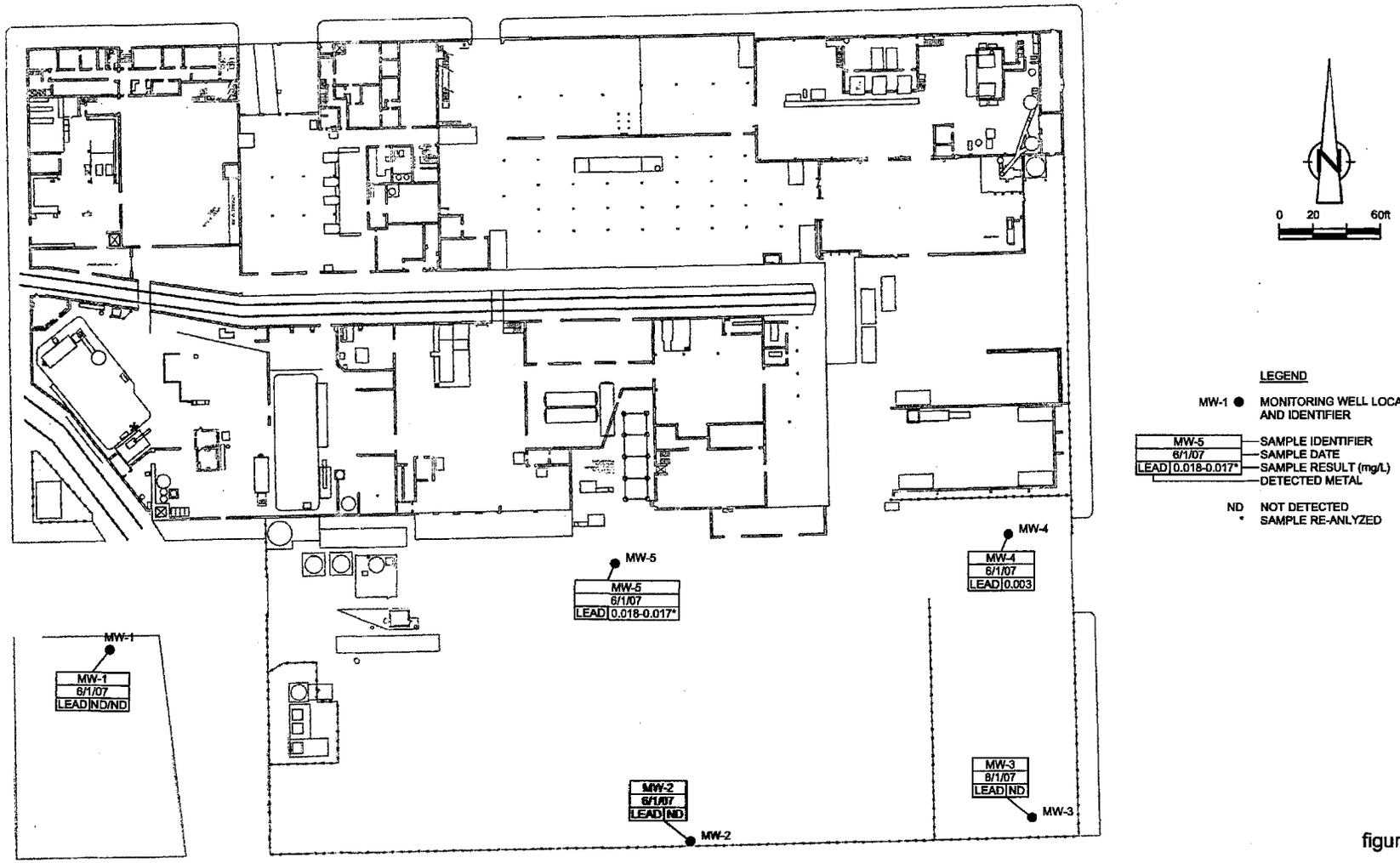


figure 16

SUMMARY OF LEAD CONCENRATION IN GROUNDWATER
JUNE 1, 2007
H. KRAMER SITE
Chicago, Illinois

39826-00(006)GN-CO016 SEP 19/2007

HK 01142

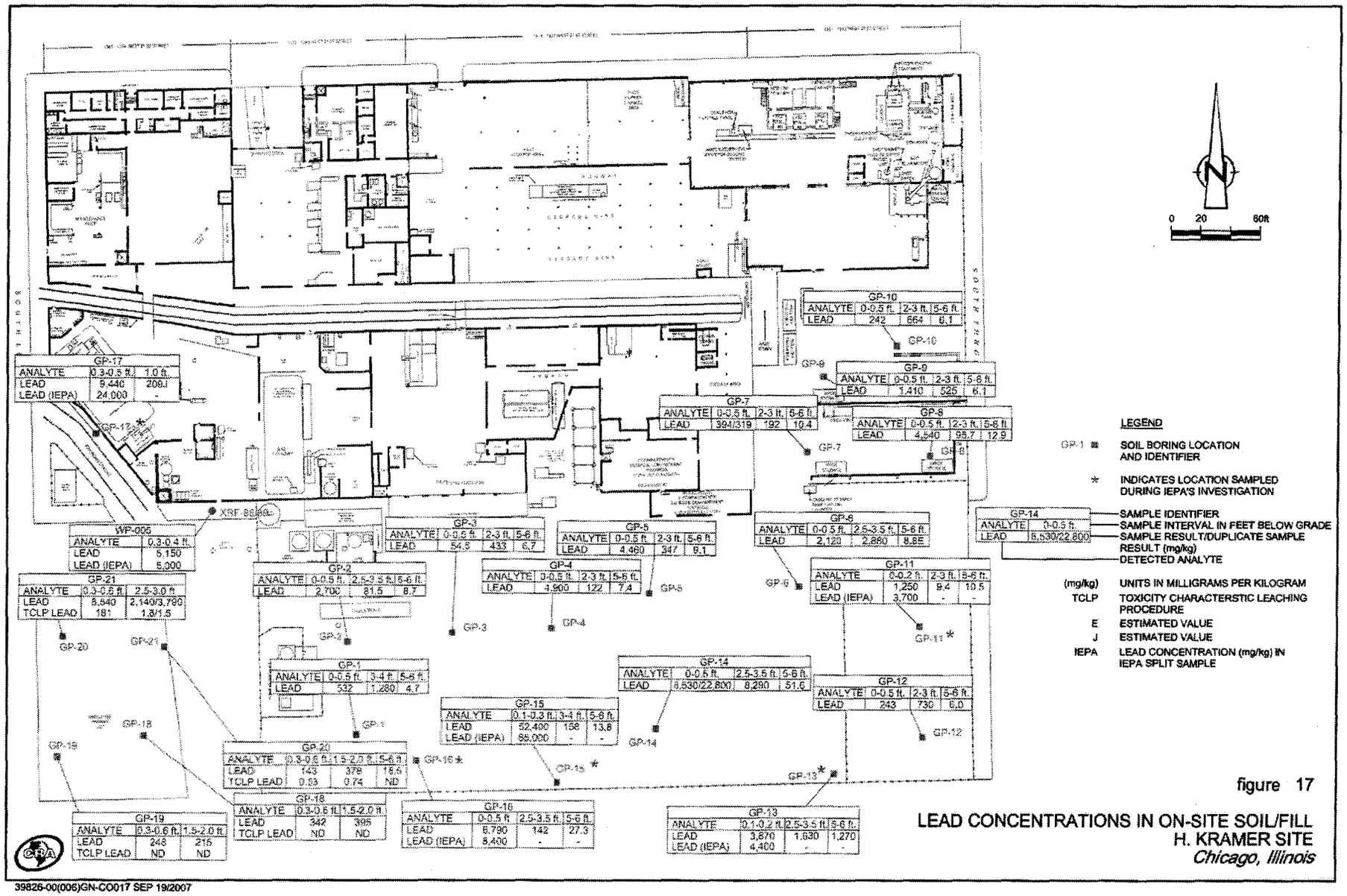


figure 17

LEAD CONCENTRATIONS IN ON-SITE SOIL/FILL
H. KRAMER SITE
Chicago, Illinois

39826-00(006)GN-CO017 SEP 19/2007

HK 01143

TABLE 1

ILLINOIS EPA XRF LEAD READINGS AND SAMPLE IDENTIFIERS
H. KRAMER SITE
CHICAGO, ILLINOIS

Site: **H. Kramer & Co.**
XRF Screening Locations and Results
Collected in Surrounding Neighborhood

	Reading No.	XRF Lead Concentration	Soil Sample Collected
Calibration	4	NA	
and	5	<LOD	
Self Test	6	5440	
	7	NA	

	Reading No.	Pb	Soil Sample Collected
In neighborhood			
1530 W. 21st St. (backyard)	8	102.5	
Backyard	9	506.8	
Front Tree Pit	10	294.4	
1532 W. 21st St. (frontyard)	11	1000	X
NW corner Blue Island & 21st	12	326.8	
at 4" horizon	13	238.6	
1415 W. Cullerton (backyard)	14	1249.6	
4" below bricks	15	1309.6	X
on top of bricks	16	828	
2014 S. Loomis (backyard)	17	742	
2016 S. Loomis (backyard)	18	952.8	
at 4" horizon	19	927.2	
2014 S. Loomis (front-city R.O.W.)	20	1260	
at 4" horizon	21	951.2	
2011 S. Loomis (frontyard)	22	2139.2	X
1331 W. Cullerton (backyard)	23	1280	
at 4" horizon	24	2979.2	
Worn paint on garage	25	39577.6	
Backyard	26	614	X (see note)
identical reading as #26	27	614	
2002 S. Throop (vacant lot)	28	773.2	X
at 4" horizon	29	332	
2012 S. Throop (backyard)	30	1120	
at 4" horizon	31	350.6	
2010 S. Throop (backyard)	32	828	
at 4" horizon	33	864	
2015 S. Throop (lot south)	34	298.4	
at 4" horizon	35	50	
2015 S. Allport (lot south)	36	873.6	
at 4" horizon	37	592.8	
2011 S. Allport (backyard)	38	138.1	
at 4" horizon	39	74.5	
2007 S. Allport (backyard)	40	1109.6	X
at 4" horizon	41	1180	
at 6" horizon	42	744	
1927 S. Allport (backyard-garden)	43	1649.6	X
at 4" horizon	44	1200	
outside of garden in grass	45	318.6	
at 4" horizon	46	1009.6	

TABLE 1

ILLINOIS EPA XRF LEAD READINGS AND SAMPLE IDENTIFIERS
H. KRAMER SITE
CHICAGO, ILLINOIS

Site: **H. Kramer & Co.**
XRF Screening Locations and Results
Collected in Surrounding Neighborhood

	Reading No.	XRF Lead Concentration	Soil Sample Collected
Calibration and Self Test			

	Reading No.	Pb	Soil Sample Collected
In neighborhood			
1913 S. Allport (frontyard)	47	102.8	
at 4" horizon	48	604.8	
Kominsky-Perez School (play area)	49	41.9	
at 4" horizon	50	<LOD	
R.O.W. west of Allport on 21st. St.	51	1109.6	X
at 4" horizon	52	2569.6	
R.O.W. SE corner Throop & 21st. St	53	670.4	
SW corner Throop & 21st. St.	54	1580	X
NW corner Throop & 21st. St	55	712	
NE corner Throop & 21st. St.	56	241.4	
1314 W. 21st. St. on cocrete sill	57	891.2	
R.O.W. NW corner Loomis & 21st. St.	58	1769.6	
at 4" horizon	59	343.6	
Juarez Academy north edge sports field	60	185.8	X
at 4" horizon	61	29.5	
Bus stop NE corner Laflin & 21st. St.	62	187.8	
at 2" horizon	63	388.8	

TABLE 1

ILLINOIS EPA XRF LEAD READINGS AND SAMPLE IDENTIFIERS
H. KRAMER SITE
CHICAGO, ILLINOIS

Site: **H. Kramer & Co.**
XRF Screening Locations and Results
Collected on H. Kramer Property

	Reading No.	Pb	Soil Sample Collected
Calibration	64	NA	
and	65	<LOD	
Self Test	66	5388.8	
	67	NA	

	Reading No.	Pb	Soil Sample Collected
H. Kramer Property			
SE corner main lot	68	1788.8	X
at 5" horizon	69	2809.6	
North portion of old east lot	70	3369.6	X
Adjacent to coke storage area	71	2680	
Main lot south of zinc oxide baghouse	72	1429.6	
Concrete apron at zinc oxide baghouse	73	18995.2	
Main lot central southeast	74	2019.2	
at 3" horizon	75	2969.6	
Main lot central southwest	76	18291.2	X
at 6" - 8" horizon (med. grey chunks)	77	222822.41	
same horizon (med. grey granules)	78	95180.8	
Main lot central north	79	626.4	
Material from inside old flue line	80	21888	
Main lot 8' west of XRF 76-78 (at 11" deep)	81	3228.8	
at 14" horizon	82	1489.6	
Piece of copper	83	<LOD	
Main lot SW portion	84	1569.6	X
at 6" horizon	85	7955.2	
Main lot NW near entry gate	86	1020	
at 5" horizon	87	1788.8	
Outside entry gate south of building	88	11795.2	X
at 6" horizon	89	3699.2	
Under steam stack SW side of bldg.	90	43596.8	X
at 6" - 8" horizon	91	12800	

TABLE 1

ILLINOIS EPA XRF LEAD READINGS AND SAMPLE IDENTIFIERS
H. KRAMER SITE
CHICAGO, ILLINOIS

Site: **H. Kramer & Co.**
XRF Screening Locations and Results
Collected in Surrounding Neighborhood

	Reading No.	Pb	Soil Sample Collected
In neighborhood			
West of Kramer in R.R. siding area	92	153.1	

	Reading No.	Pb	Soil Sample Collected
Calibration	93	NA	
and	94	<LOD	
Self Test	95	5228.8	

	Reading No.	Pb	Soil Sample Collected
In neighborhood			
1316 W. Cullerton (backyard garden)	96	661.6	
at 4" horizon	97	699.2	
1329 W. Cullerton (backyard garden)	98	1069.6	
at 4" horizon	99	1420	
1342 W. Cullerton (frontyard)	100	450	
at 4" - 5" horizon	101	1620	
1330 W. Cullerton (bare front play area)	102	793.6	
at 5" horizon	103	1009.6	
1332 W. Cullerton (soil under front porch)	104	130.9	
at 1" - 2" horizon	105	50.2	
1917 S. Loomis (bare frontyard)	106	1229.6	
at 4" - 5" horizon	107	242.6	

TABLE 1

ILLINOIS EPA XRF LEAD READINGS AND SAMPLE IDENTIFIERS
H. KRAMER SITE
CHICAGO, ILLINOIS

Site: **H. Kramer & Co.**
XRF Screening Locations and Results
Collected in Surrounding Neighborhood

	Reading No.	Pb	Soil Sample Collected
Calibration	108	NA	
and	109	<LOD	
Self Test	110	5520	

	Reading No.	Pb	Soil Sample Collected
In neighborhood			
1918 S. Loomis (frontyard)	111	684.4	
at 4" horizon	112	530.8	
1420 W. Cullerton (front of empty lot)	113	442.4	
at 4" horizon	114	394.6	
1334 W. 19th St.	115	512	
at 4 " horizon	116	806.8	
1.5' north of XRF 115	117	512	
Dust on concrete outside NW corner Kramer	118	1699.2	
East end of R.R. R.O.W. west of Kramer	119	2068.8	
at 3" horizon	120	2539.2	
R.R. R.O.W midway between Loomis & Laflin	121	1649.6	
at 4" horizon	122	2289.6	
West end of R.R. R.O.W. west of Kramer	123	542	
at 4" horizon	124	594.8	
West end of 1400 block of 21st Place	125	323.4	
at 4" horizon	126	363.4	
Middle of the 1400 block of 21st Place	127	389.6	
at 3" horizon	128	476.4	
Outside H.Kramer at east overhead door on 21st St.	129	1429.6	
North portion of 2100 block S. Throop (west R.O.W.)	130	1180	
at 4" - 5" horizon	131	1100	
Former 21st Place driveway into Kramer (east entry)	132	988.8	
at 3" - 4" horizon	133	1409.6	
South portion of 2100 block S. Throop (west R.O.W.)	134	710.8	
at 5" horizon	135	176.9	
East end of alley south of H. Kramer	136	682.4	
Mid point in alley south of H. Kramer	137	3299.2	
West end of ally south of H. Kramer	138	572.8	
at 2" - 3" horizon	139	782	
Pile of dark grey material 15' east of XRF 138/139	140	<LOD	
City R.O.W. west of H. Kramer cooling tower	141	1500	
at 2" horizon	142	151.7	
City R.O.W. west of H. Kramer north of loading dock	143	884	
at 3" - 4" horizon	144	247	
City R.O.W. west of Dvorak Park at 21st. St & May	145	269.8	
at 4" horizon	146	364.4	

Notes:
- Readings collected from soil surface either on bare soil or just beneath sod, unless otherwise noted.
- Horizontal grid lines on Table separate XRF screening locations.
- <LOD indicates "below level of detection".
- The soil sample collected at XRF-26 was actually collected next to the garage near the alley.

TA 2

PHASE 1 SAMPLE KEY
H. KRAMER SITE
CHICAGO, ILLINOIS

CRA Sample Number	*Date Collected*	*Time Collected*	*CRA Sample Depth (inches)*	*IEPA Sample Number*	*IEPA Sample Depth (inches)*	*Sample Matrix*	*Sample Location*
S-061405-WP-001	6/14/2005	11:50	1 to 2	X101	1 to 2	Soil/Gravel	XRF-68 Location
S-061405-WP-002	6/14/2005	12:00	0 to 2	X102	0 to 2	Hard Gravel	XRF-70 Location
S-061405-WP-003	6/14/2005	12:10	0 to 4	X103	0 to 4	Soil/Gravel	XRF-76, 77, 78 Location
S-061405-WP-004	6/14/2005	12:20	0 to 5	X104	0 to 5	Soil/Gravel	XRF-84, 85 Location
S-061405-WP-005	6/14/2005	12:35	3 to 4	X105	3 to 4	Soil/Gravel	XRF-88, 89 Location
S-061405-WP-006	6/14/2005	12:45	4 to 6	X106	4 to 6	Soil/Gravel	XRF-90, 91 Location
S-061405-WP-007	6/14/2005	14:03	0 to 4	X107	0 to 4	Soil	1532 W. 21 St., Front yard
S-061405-WP-008	6/14/2005	14:18	0 to 4	X108	0 to 1	Soil	High School ball-field adjacent to sidewalk (east side of 21 ST.)
S-061405-WP-009	6/14/2005	14:45	0 to 4	X109	0 to 2	Soil	1415 W. Cullerton, Backyard under patio bricks
S-061405-WP-010	6/14/2005	14:55	0 to 4	X110	0 to 2	Soil	2011 S. Loomis, Below grade front yard (near sewer/sump)
S-061405-WP-011	6/14/2005	15:10	0 to 4	X111	0 to 2	Soil	1331 W Cullerton, Backyard adjacent to garage/walkway. (IEPA noted high XRF readings other side of garage likely due to paint)
S-061405-WP-012	6/14/2005	15:25	0 to 4	X112	0 to 3	Soil	2002 S. Throop, South central potion of empty lot (across from Komensky School)
S-061405-WP-013	6/14/2005	16:00	0 to 4	X113	0 to 2	Soil	2007 S. Allport, Backyard between buildings
S-061405-WP-014	6/14/2005	16:15	0 to 4	X114	0 to 3	Soil	1927 S. Allport, Backyard in tilled garden
S-061405-WP-015	6/14/2005	16:35	0 to 4	X115	0 to 4	Soil	City Park Way South Side of 21ST 1/2 Block West of Allport
S-061405-WP-016	6/14/2005	16:50	0 to 2	X116	0 to 2	Soil	Sediment filled depression in sidewalk, NE corner of H. Kramer

TABLE 3

PHASE 2 SAMPLE KEY
H. KRAMER SITE
CHICAGO, ILLINOIS

Sample Number	*Sample Location*	*Sample Matrix*	*Sample Depth Interval (ft bgs)* [1]	*QA/QC* [2]	*Analyses*
S-070705-JH-001	GP-15	Soil	3/4	--	Priority Pollutant Metals
S-070705-JH-002	GP-15	Soil	5/6	--	Priority Pollutant Metals
S-070705-JH-003	GP-1	Soil	0/0.5	--	Priority Pollutant Metals
S-070705-JH-004	GP-1	Soil	3/4	--	Priority Pollutant Metals
S-070705-JH-005	GP-1	Soil	5/6	--	Priority Pollutant Metals
S-070705-JH-006	GP-2	Soil	0/0.5	--	Priority Pollutant Metals
S-070705-JH-007	GP-2	Soil	2.5/3.5	--	Priority Pollutant Metals
S-070705-JH-008	GP-2	Soil	5/6	--	Priority Pollutant Metals
S-070705-JH-009	GP-16	Soil	2.5/3.5	--	Priority Pollutant Metals
S-070705-JH-010	GP-16	Soil	5/6	--	Priority Pollutant Metals
S-070705-JH-011	GP-13	Soil	2.5/3.5	--	Priority Pollutant Metals
S-070705-JH-012	GP-13	Soil	5/6	--	Priority Pollutant Metals
S-070705-JH-013	GP-14	Soil	0/0.5	--	Priority Pollutant Metals
S-070705-JH-014	GP-14	Soil	0/0.5	Duplicate	Priority Pollutant Metals
S-070705-JH-015	GP-14	Soil	2.5/3.5	--	Priority Pollutant Metals
S-070705-JH-016	GP-14	Soil	5/6	--	Priority Pollutant Metals
W-070705-JH-017	--	Water	--	Rinsate	Priority Pollutant Metals
S-070705-JH-018	GP-6	Soil	0/0.5	--	Priority Pollutant Metals
S-070705-JH-019	GP-6	Soil	2.5/3.5	--	Priority Pollutant Metals
S-070705-JH-020	GP-6	Soil	5/6	--	Priority Pollutant Metals
S-070705-JH-021	GP-5	Soil	0/0.5	--	Priority Pollutant Metals
S-070705-JH-022	GP-5	Soil	2/3	--	Priority Pollutant Metals
S-070705-JH-023	GP-5	Soil	5/6	--	Priority Pollutant Metals
S-070705-JH-024	GP-4	Soil	0/0.5	--	Priority Pollutant Metals
S-070705-JH-025	GP-4	Soil	2/3	--	Priority Pollutant Metals
S-070705-JH-026	GP-4	Soil	5/6	--	Priority Pollutant Metals
S-070705-JH-027	GP-3	Soil	0/0.5	--	Priority Pollutant Metals
S-070705-JH-028	GP-3	Soil	2/3	--	Priority Pollutant Metals
S-070705-JH-029	GP-3	Soil	5/6	--	Priority Pollutant Metals
S-070705-JH-030	GP-12	Soil	0/0.5	--	Priority Pollutant Metals
S-070705-JH-031	GP-12	Soil	2/3	--	Priority Pollutant Metals
S-070705-JH-032	GP-12	Soil	5/6	--	Priority Pollutant Metals
S-070705-JH-033	GP-11	Soil	2/3	--	Priority Pollutant Metals
S-070705-JH-034	GP-11	Soil	5/6	--	Priority Pollutant Metals
S-070705-JH-035	GP-7	Soil	0/0.5	--	Priority Pollutant Metals
S-070705-JH-036	GP-7	Soil	0/0.5	Duplicate	Priority Pollutant Metals
S-070705-JH-037	GP-7	Soil	2/3	--	Priority Pollutant Metals
S-070705-JH-038	GP-7	Soil	5/6	--	Priority Pollutant Metals
W-070705-JH-039	--	Water	--	Rinsate	Priority Pollutant Metals
S-070705-JH-040	GP-8	Soil	0/0.5	--	Priority Pollutant Metals

TABLE 3

PHASE 2 SAMPLE KEY
H. KRAMER SITE
CHICAGO, ILLINOIS

Sample Number	*Sample Location*	*Sample Matrix*	*Sample Depth Interval (ft bgs)* [1]	*QA/QC* [2]	*Analyses*
S-070705-JH-041	GP-8	Soil	2/3	--	Priority Pollutant Metals
S-070705-JH-042	GP-8	Soil	5/6	--	Priority Pollutant Metals
S-070705-JH-043	GP-10	Soil	0/0.5	--	Priority Pollutant Metals
S-070705-JH-044	GP-10	Soil	2/3	--	Priority Pollutant Metals
S-070705-JH-045	GP-10	Soil	5/6	--	Priority Pollutant Metals
S-070705-JH-046	GP-9	Soil	0/0.5	--	Priority Pollutant Metals
S-070705-JH-047	GP-9	Soil	2/3	--	Priority Pollutant Metals
S-070705-JH-048	GP-9	Soil	5/6	--	Priority Pollutant Metals
S-070805-JH-051	GP-17	Soil	1.0	--	Priority Pollutant Metals

t bgs - feet below ground surface
[2]QA/QC - Quality Assurance/Quality Control

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TABLE 4

PHASE 3 SAMPLE KEY
SOUTHWEST PARKING LOT AREA
H. KRAMER SITE
CHICAGO, ILLINOIS

Sample Number	*Sample Location*	*Sample Matrix*	*Sample Depth Interval (ft bgs)* [1]	*QA/QC* [2]	*Analyses*
S-011006-WP-079	GP-18	Soil	0.3/0.5	--	Total Lead, TCLP Lead
S-011006-WP-080	GP-18	Soil	1.5/2.0	--	Total Lead, TCLP Lead
S-011006-WP-081	--	Water	--	Rinsate	Total Lead
S-011006-WP-082	GP-19	Soil	0.3/0.6	--	Total Lead, TCLP Lead
S-011006-WP-083	GP-19	Soil	1.5/2.0	--	Total Lead, TCLP Lead
S-011006-WP-084	GP-20	Soil	0.3/0.6	--	Total Lead, TCLP Lead
S-011006-WP-085	GP-20	Soil	1.5/2.0	--	Total Lead, TCLP Lead
S-011006-WP-086	GP-20	Soil	6.0/6.5	--	Total Lead, TCLP Lead
S-011006-WP-087	GP-21	Soil	0.3/0.6	--	Total Lead, TCLP Lead
S-011006-WP-088	GP-21	Soil	2.5/3.0	--	Total Lead, TCLP Lead
S-011006-WP-089	GP-21	Soil	2.5/3.0	Duplicate	Total Lead, TCLP Lead

ft bgs - feet below ground surface

[2]QA/QC - Quality Assurance/Quality Control

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TABLE 5

PHASE 4 SAMPLE KEY
H. KRAMER
CHICAGO, ILLINOIS

Sample Location	*Sample Identification*	*Date Collected*	*Sample Depth (ft bgs)* [1]	*Sample Matrix*	*Analyses*
MW-1	S-052107-SP-03	5/21/2007	10	Soil	TOC[2] & pH
MW-2	S-050707-SP-01	5/7/2007	10	Soil	TOC & pH
MW-3	S-052107-SP-04	5/21/2007	10	Soil	TOC & pH
MW-5	S-050707-SP-02	5/7/2007	9.5	Soil	TOC & pH
MW-1	GW-060107-WP-010	6/1/2007	NA[3]	Groundwater	Total Lead
MW-2	GW-060107-WP-005	6/1/2007	NA	Groundwater	Total Lead
MW-3	GW-060107-WP-007	6/1/2007	NA	Groundwater	Total Lead
MW-3 (duplicate)	GW-060107-WP-008	6/1/2007	NA	Groundwater	Total Lead
MW-4	GW-060107-WP-009	6/1/2007	NA	Groundwater	Total Lead
MW-5	GW-060107-WP-006	6/1/2007	NA	Groundwater	Total Lead

[1]ft bgs - feet below ground surface
[2]TOC - Total Organic Carbon
[3]NA - Not Applicable

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TABLE 6

SUMMARY OF WELL DEVELOPMENT FIELD PARAMETERS
H. KRAMER
CHICAGO, ILLINOIS

Well Identifier	Date	Well Volume (gallons)	Static Water Level (ft BTOC)[1]	Intial Well Depth (feet)	End Well Depth (feet)	Volume Purged (gallons)	pH (Std. Units)[2]	Temperature (°C)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	Clarity / Color	Odor
MW-1	5/22/2007	0.99	5.29	11.49	11.50	2.5	7.92	14.8	2.74	315	cloudy, brown	none
						5	7.81	14.9	2.73	870	cloudy, brown	none
				WELL WENT DRY AFTER 5 GALLONS WERE REMOVED								
						10	7.74	15.6	2.75	240	cloudy	none
						12.5	7.69	15.7	2.76	107	slightly cloudy	none
						13.5	7.68	15.9	2.77	57	slightly cloudy	none
						14.5	7.68	15.8	2.78	48	slightly cloudy	none
						15.5	7.68	15.9	2.78	49	slightly cloudy	none
MW-2	5/7/2007	0.93	5.56	11.39	11.30	2	6.91	13.3	2.23	>1000	cloudy, brown	none
						4	6.90	12.7	2.20	>1000	cloudy, brown	none
				WELL WENT DRY AFTER 5 GALLONS WERE REMOVED								
	5/21/2007	0.89	5.71	11.31	11.33	8	7.24	17.2	1.83	561	cloudy	none
						10	7.19	17.3	1.72	111	cloudy	none
						12	7.14	17.5	1.78	109	cloudy	none
				WELL WENT DRY AFTER 4 GALLONS WERE REMOVED								
						14	7.14	17.6	1.79	189	slightly cloudy	none
						16	7.13	17.6	1.79	162	slightly cloudy	none
				WELL WENT DRY AFTER 3 GALLONS WERE REMOVED								
						17	7.08	17.1	1.78	152	slightly cloudy	none
						19	7.09	17.2	1.79	108	slightly cloudy	none

TABLE 6

SUMMARY OF WELL DEVELOPMENT FIELD PARAMETERS
H. KRAMER
CHICAGO, ILLINOIS

Well Identifier	Date	Well Volume (gallons)	Static Water Level (ft BTOC)[1]	Intial Well Depth (feet)	End Well Depth (feet)	Volume Purged (gallons)	pH (Std. Units)[2]	Temperature (°C)[3]	Conductivity (mS/cm)[4]	Turbidity (NTU)[5]	Clarity / Color	Odor
MW-3	5/22/2007	1.03	4.87	11.34	11.33	5	7.48	16.8	1.73	>1000	cloudy, brown	none
						7	7.31	16.7	1.64	248	cloudy, brown	none
				WELL WENT DRY AFTER 8 GALLONS WERE REMOVED								
						10	7.45	16.2	1.88	>1000	cloudy, brown	none
				WELL WENT DRY AFTER 3 GALLONS WERE REMOVED								
						12	7.46	15.4	1.92	599	cloudy, brown	none
						14	7.39	15.5	1.92	695	cloudy, brown	none
				WELL WENT DRY AFTER 5 GALLONS WERE REMOVED								
						18	7.43	13.8	1.72	870	cloudy, brown	none
				WELL WENT DRY AFTER 3 GALLONS WERE REMOVED								
MW-4	5/21/2007	1.4	2.64	11.51	11.45	5	7.60	13.8	0.99	>1000	cloudy, brown	none
						10	7.53	13.2	0.98	>1000	cloudy, brown	none
				WELL WENT DRY AFTER 5 GALLONS WERE REMOVED								
						15	7.47	12.7	1.00	>1000	cloudy, brown	none
				WELL WENT DRY AFTER 5 GALLONS WERE REMOVED								
						17	7.49	14.3	1.12	765	cloudy, brown	none
						19	7.47	13.7	1.09	459	cloudy, brown	none
						21	7.46	13.7	1.09	205	cloudy	none
						23	7.46	13.8	1.08	216	cloudy	none
						30	7.45	13.9	1.08	202	cloudy	none

TABLE 6

SUMMARY OF WELL DEVELOPMENT FIELD PARAMETERS
H. KRAMER
CHICAGO, ILLINOIS

Well Identifier	*Date*	*Well Volume (gallons)*	*Static Water Level (ft BTOC)* [1]	*Intial Well Depth (feet)*	*End Well Depth (feet)*	*Volume Purged (gallons)*	*pH (Std. Units)* [2]	*Temperature (°C)* [3]	*Conductivity (mS/cm)* [4]	*Turbidity (NTU)* [5]	*Clarity / Color*	*Odor*
MW-5	5/21/2007	0.97	4.47	10.55	10.51	2.5	7.47	16.2	1.04	>1000	cloudy, brown	slight odor
						5	7.43	16.0	1.10	>1000	cloudy, brown	slight odor
WELL WENT DRY AFTER 5 GALLONS WERE REMOVED												
	5/22/2007		3.10			10	7.52	15.7	1.06	683	cloudy, brown	none
						15	7.41	15.2	1.09	864	cloudy, brown	none
WELL WENT DRY AFTER 7.5 GALLONS WERE REMOVED												
						20	7.54	18.0	1.18	922	cloudy, tan	none
						22	7.39	18.1	1.17	175	slightly cloudy	none
						24	7.31	18.0	1.17	84	slightly cloudy	none

[1] ft BTOC - feet below top of casing
[2] Std. Units - standard units
[3] °C - degrees Celsius
[4] mS/cm - millisiemens per centimeter
[5] NTU - nephelometric turbidity units

TABLE 7

SUMMARY OF MONITORING WELL PURGING PARAMETERS
H. KRAMER
CHICAGO, IL

Well Identifier	*Date*	*Static Water Level (feet BTOC)*[1]	*Total Depth (feet BTOC)*	*Time*	*Water Level (feet BTOC)*	*pH (Std. Units)*[2]	*Temperature (°C)*[3]	*Conductivity (mS/cm)*[4]	*Turbidity (NTU)*[5]	*Observations*
MW-1	6/1/2007	5.41	11.50	14:25	5.73	7.47	19.2	3.07	4.32	clear
				14:35	5.81	7.31	18.6	3.05	7.31	clear
				14:45	5.78	7.47	19.2	3.05	5.33	clear
				14:55	5.78	7.47	19.4	3.05	6.44	clear
				15:05	5.78	7.48	19.4	3.05	4.97	clear
MW-2	6/1/2007	5.83	11.40	8:50	6.01	6.86	18.7	2.28	278	slightly cloudy
				9:05	6.01	7.07	18.0	1.93	41	clear
				9:20	6.00	7.09	18.2	1.91	16.9	clear
				9:35	5.98	7.07	18.5	1.92	10.97	clear
				9:50	5.98	7.06	18.1	1.94	5.12	clear
				10:01	5.97	7.05	18.1	1.95	5.40	clear
				10:06	5.97	7.04	18.1	1.94	4.09	clear
MW-3	6/1/2007	4.75	11.20	11:05	5.11	7.27	18.5	1.88	372	slightly cloudy
				11:22	5.20	7.17	17.9	1.90	29.2	clear
				11:37	5.18	7.14	17.9	1.87	14.3	clear
				11:53	5.15	7.12	18.3	1.91	7.34	clear
				12:04	5.15	7.13	18.2	1.91	4.09	clear
				12:15	5.15	7.13	18.3	1.91	2.78	clear

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TABLE 7

SUMMARY OF MONITORING WELL PURGING PARAMETERS
H. KRAMER
CHICAGO, IL

Well Identifier	*Date*	*Static Water Level (feet BTOC)* [1]	*Total Depth (feet BTOC)*	*Time*	*Water Level (feet BTOC)*	*pH (Std. Units)* [2]	*Temperature (°C)* [3]	*Conductivity (mS/cm)* [4]	*Turbidity (NTU)* [5]	*Observations*
MW-4	6/1/2007	2.66	11.39	11:13	2.85	7.60	19.5	1.87	61.8	slightly cloudy
				11:30	2.90	7.56	19.2	1.82	17.3	clear
				11:46	2.89	7.52	19.6	1.75	8.15	clear
				12:00	2.89	7.52	19.4	1.68	6.39	clear
				12:08	2.88	7.53	19.5	1.68	9.13	clear
				12:20	2.87	7.54	19.5	1.68	13.20	clear
				12:32	2.91	7.53	19.6	1.68	7.80	clear
				12:45	2.94	7.55	19.7	1.69	7.17	clear
				12:55	2.95	7.53	19.6	1.70	5.06	clear
MW-5	6/1/2007	3.24	10.39	9:25	3.66	7.43	20.8	1.41	40.7	slightly cloudy
				9:40	3.68	7.19	20.6	1.45	17.2	clear
				9:55	3.72	7.29	20.8	1.45	9.36	clear
				10:05	3.74	7.32	20.4	1.46	5.50	clear
				10:22	3.76	7.33	20.6	1.46	4.85	clear
				10:30	3.76	7.34	20.8	1.46	3.71	clear

[1] BTOC - feet below top of casing
[2] Std. Units - standard units
[3] °C - degrees Celsius
[4] mS/cm - millisiemens per centimeter
[5] NTU - nephelometric turbidity units

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TABLE 8

GROUNDWATER ELEVATIONS
H. KRAMER
CHICAGO, ILLINOIS

		06/01/07		06/29/07	
Well I.D.	*Top of Casing Elevation (ft AMSL)* [1]	*Depth to Water (ft BTOC)* [2]	*Groundwater Elevation (ft AMSL)*	*Depth to Water (ft BTOC)*	*Groundwater Elevation (ft AMSL)*
MW-1	98.72	5.41	93.31	5.45	93.27
MW-2	101.03	5.83	95.2	5.98	95.05
MW-3	99.90	4.75	95.15	4.98	94.92
MW-4	98.36	2.66	95.70	2.89	95.47
MW-5	98.57	3.24	95.33	3.28	95.29

[1] ft AMSL - feet above mean sea level
[2] ft BTOC - feet below top of casing

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TABLE 9

SUMMARY OF RESPONSE TEST DATA
H. KRAMER SITE
CHICAGO, ILLINOIS

Well Identifier	*Calculated Hydraulic Conductivity (cm/sec)*[1]
MW-1	9.42E-05
MW-2	9.89E-05
MW-3	8.95E-05
MW-4	3.07E-04
Geometric Mean	9.58E-05

cm/sec - centimeters per second

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TABLE 10

WATER WELL SEARCH RESULTS
H. KRAMER FACILITY
CHICAGO, ILLINOIS

Well ID	Database	Township	Range	Section	Plot	Owner	Driller	Construction Date	Depth	Record Type	Use	Aquifer	CRA Comment
33415	ISWS	39N	14E	17	--	CRACKER JACK CO (WELL A)	--	--	380	O	Industrial-Commercial	Bedrock	Cannot Locate
33691	ISWS	39N	14E	17	--	FRANK STURGES	--	1899	250	O	Domestic	Bedrock	Cannot Locate; Likely Does Not Exist
189822	ISWS	39N	14E	17	--	CRACKER JACK CO	--	--	--	O	Industrial-Commercial	--	Cannot Locate
23923	ISWS	39N	14E	17	--	AUTO ELECTRIC CO	--	--	280	O	Industrial-Commercial	Bedrock	Cannot Locate
33850	ISWS	39N	14E	19	--	HOERBER BREWING CO	GEIGER	--	350	OG	Industrial-Commercial	Bedrock	Cannot Locate
33877	ISWS	39N	14E	19	--	SCHOENHOFEN-EDELWEISS/NATIONAL	--	1895	1800	O	Industrial-Commercial	Bedrock	Cannot Locate; Likely Does Not Exist
04026	ISGS	39N	14E	19	1D	WHITEEAGLE BREW CO	J.P. MILLER	--	1620	--	Industrial-Commercial	Bedrock	--
33876 03180	ISWS ISGS	39N	14E	19	3D	SCHOENHOFEN-EDELWEISS/NATIONAL NATIONAL BEVERAGE	J.P. MILLER	1924	1948 1949	O	Industrial-Commercial	Bedrock	Likely Does Not Exist
33878 01633	ISWS ISGS	39N	14E	19	4E	SCHOENHOFEN-EDELWEISS/NATIONAL NATIONAL BREW CO	J.P. MILLER	1901	1590	OC	Industrial-Commercial	Bedrock	Likely Does Not Exist
33885	ISWS	39N	14E	20	--	STEGER BREWING CO	--	--	1750	O	Industrial-Commercial	Bedrock	Cannot Locate
33832	ISWS	39N	14E	20	--	DIENER CUT STONE CO	--	1934	250	I	Industrial-Commercial	Bedrock	Cannot Locate; Likely Does Not Exist
9247	ISWS	39N	14E	20	--	GOLDENROD ICE CREAM	J P MILLER/GEIGER	1923	700	O	Industrial-Commercial	Bedrock	Cannot Locate; Likely Does Not Exist
23924	ISWS	39N	14E	20	--	ATLAS BREWING CO	--	1934	120	O	Industrial-Commercial	Bedrock	Cannot Locate; Likely Does Not Exist
23926	ISWS	39N	14E	20	--	HL SCHROEDER	--	1890	150	O	Domestic	--	Cannot Locate; Likely Does Not Exist
306626 32532	ISWS ISGS/IEPA	39N	14E	20	1A	CONCRETE PRODUCTION CONCRETE PROD SERVICES	JV MOORE LARRY WALTERS	1998	1005	RG	Industrial-Commercial Semi-Private Water Well	Bedrock	--
235383 31416	ISWS IEPA	39N	14E	20	8A	COCA-COLA BOTTLING CO., MW-1	JAVCO INC.	1992	17	RG	Test Well	Unconsolidated	Shallow Monitoring Well
235411 31417	ISWS IEPA	39N	14E	20	8A	COCA-COLA BOTTLING CO., MW-2	JAVCO INC.	1992	17	RG	Test Well	Unconsolidated	Shallow Monitoring Well
33870	ISWS	39N	14E	21	--	PURE CARBONIC CO.	--	1900	1700	O	Industrial-Commercial	Bedrock	Cannot Locate; Likely Does Not Exist
242783	ISWS	39N	14E	21	--	AMOCO OIL CO MW-4	ENVIRON CONSTUC CO	1993	15	RG	Monitoring Well	Unconsolidated	Cannot Locate; Shallow Monitoring Well
236461	ISWS	39N	14E	21	--	AMOCO OIL CO WELL MW-6	ENVIRON CONSTUC CO	1993	11	RG	Monitoring Well	Bedrock	Cannot Locate; Shallow Monitoring Well
236462	ISWS	39N	14E	21	--	AMOCO OIL CO WELL MW-5	ENVIRON CONSTUC CO	1993	11	RG	Monitoring Well	Unconsolidated	Cannot Locate; Shallow Monitoring Well
23927	ISWS	39N	14E	21	--	BISHOP & BABCOCK CO "A"	J.P. MILLER	--	1307	OG	Industrial-Commercial	Bedrock	Cannot Locate
33826	ISWS	39N	14E	21	--	CRANE CO	--	--	250	O	Industrial-Commercial	Bedrock	Cannot Locate
33827	ISWS	39N	14E	21	--	CRANE CO	--	--	290	O	Industrial-Commercial	Bedrock	Cannot Locate
33828	ISWS	39N	14E	21	--	CROOKS TERMINAL WORKS/CRANE CO	--	--	450	O	Industrial-Commercial	Bedrock	Cannot Locate
33890	ISWS	39N	14E	21	--	UNION COLD STORAGE CO	--	--	1135	O	Industrial-Commercial	Bedrock	Cannot Locate
33858	ISWS	39N	14E	21	--	KELLOGG TERMINAL WORKS	J.P. MILLER	1910	1600	OC	Industrial-Commercial	Bedrock	Cannot Locate; Likely Does Not Exist
33859	ISWS	39N	14E	21	--	KELLOGG TERMINAL WORKS	J.P. MILLER	1900	2187	OC	Industrial-Commercial	Bedrock	Cannot Locate; Likely Does Not Exist
860	ISWS	39N	14E	21	--	KELLOGG TERMINAL WORKS	--	1882	2180	O	Industrial-Commercial	Bedrock	Cannot Locate; Likely Does Not Exist

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TABLE 10

WATER WELL SEARCH RESULTS
H. KRAMER FACILITY
CHICAGO, ILLINOIS

Well ID	*Database*	*Township*	*Range*	*Section*	*Plot*	*Owner*	*Driller*	*Construction Date*	*Depth*	*Record Type*	*Use*	*Aquifer*	*CRA Comment*
33856 03194	ISWS ISGS/IEPA	39N	14E	21	7B	JOANNA WESTERN MILLS/WESTERN S WESTERN SHADE CLOTH	GEIGER	1940	1620	OGCI	Industrial-Commercial	Bedrock	Likely Does Not Exist
33857 03195	ISWS ISGS/IEPA	39N	14E	21	7B	JOANNA WESTERN MILLS/WESTERN S WESTERN SHADE CLOTH	GEIGER	1945	1603	OGC	Industrial-Commercial	Bedrock	Likely Does Not Exist
401098	ISWS	39N	14E	21	7B	INDUSTRIAL COATING GROUP, INC	--	--	1610	--	Industrial-Commercial	Bedrock	Well Unused; Likely Does Not Exist
33808	ISWS	39N	14E	28	--	A P CALLAHAN CO (DUPLICATE)	GEIGER	1906	386	COG	Industrial-Commercial	Bedrock	Cannot Locate; Likely Does Not Exist
33862	ISWS	39N	14E	28	--	LAKE SHORE & ROCK IS RR	GEIGER	--	1612	OG	Industrial-Commercial	Bedrock	Cannot Locate
33835	ISWS	39N	14E	28	--	E K POND & CO	--	--	--	O	Industrial-Commercial	--	Cannot Locate
33847	ISWS	39N	14E	28	--	GOTTFRIEND BREWING CO	J.P. MILLER	1912	1658	OGC	Industrial-Commercial	Bedrock	Cannot Locate; Likely Does Not Exist
189826	ISWS	39N	14E	28	--	LASALLE AUTO STORAGE	--	1934	300	O	Industrial-Commercial	--	Cannot Locate; Likely Does Not Exist
33868	ISWS	39N	14E	29	--	OMAHA PACKING CO (MOVED)	--	--	--	I	Industrial-Commercial	Bedrock	Cannot Locate
23931 01499	ISWS ISGS/IEPA	39N	14E	29	4D	BISMARCK BREWING CO/CITIZEN BR CITIZENS BREWING	J.P. MILLER	1914	2188	O	Industrial-Commercial	Bedrock	Likely Does Not Exist
189823	ISWS	39N	14E	30	--	INTER HARVESTOR	GEIGER	1905	1745	O	Industrial-Commercial	Bedrock	Cannot Locate; Out of Service in 1920; Likely Does Not Exist
33770	ISWS	39N	14E	30	--	INTERNATIONAL HARVESTOR	GEIGER	1905	1659	O	Industrial-Commercial	Bedrock	Cannot Locate; Likely Does Not Exist
23932	ISWS	39N	14E	30	1H	CHICAGO CURLED HAIR CO	--	1895	350	O	Industrial-Commercial	--	Likely Does Not Exist
33818 25628	ISWS ISGS/IEPA	39N	14E	30	4D	CHICAGO BLOCK CO	K & K	1977	120	RG	Industrial-Commercial	Bedrock	--

Notes:
Record Types
A - Affidavit
C - Chemical Analysis
G - Geology
'entory
ny Other Type of Record
R - Construction Report
The section and plot numbers (listed in the fifth and sixth columns of this table) correspond to the locations marked on Figure 10.

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TABLE 11

PHASE 1 SOIL ANALYTICAL RESULTS
H. KRAMER SITE
CHICAGO, ILLINOIS

		TACO Tier 1 Soil Remediation Objectives[1]				WP-001	WP-002	WP-003	WP-004	WP-005	WP-006	WP-007	WP-008
						1 - 2	0 - 2	0 - 4	0 - 5	3 - 4	4 - 6	0 - 4	0 - 4
						6/14/2005	6/14/2005	6/14/2005	6/14/2005	6/14/2005	6/14/2005	6/14/2005	6/14/2005
		Industrial-Commercial		Construction Worker		On-Site	On-Site	On-Site	On-Site	On-Site	On-Site	Off-Site	Off-Site
		Ingestion	Inhalation	Ingestion	Inhalation								
Metals	Units												
Aluminum	mg/kg[2]	–	–	–	–	6430	1770	2000	3500	5320	9640	5570	13000
Antimony	mg/kg	820	–	82	–	14.9	1.5 B	ND	3.8 B	4.4 B	2.4 B J	2.9 B	0.49 B
Arsenic	mg/kg	13	1200	61	25000	21.1	3.2	33.2	11.2	9.1	21.1	19.3	8.7
Barium	mg/kg	140000	910000	14000	870000	1550	78.1	230	246	200	292	404	134
Beryllium	mg/kg	4100	2100	410	44000	2.2	0.74	2.9	6.1	2.4	11.4	1	0.81
Cadmium	mg/kg	2000	2800	200	59000	29.5	16.1	234	76.1	40.6		4	0.58 B
Chromium Total	mg/kg	6100	420	4100	690	47.5	15.5	24.3	52.9	32.4	119	25.5	24.1
Cobalt	mg/kg	120000	–	12000	–	7.9	2.1 B	2.6 B	6.2	5.1 B	22.6	6.0	10.2
Copper	mg/kg	82000	–	8200	–	4390	1810	8220	11600	9100	17000	291	45.2
Lead	mg/kg	800	–	700	–	3870	1250	52400	8790	5150	9440	1520	61.1
Manganese	mg/kg	96000	91000	9600	8700	942	239	212	665	369	1460	413	609
Mercury	mg/kg	610	16[3]	61	0.1[3]	1.2	0.19	0.42	0.65	0.33	1.6	1.1	0.087 B
Nickel	mg/kg	41000	21000	4100	440000	83.8	30.5	69.7	188	91.2	476	22.4	22.6
Selenium	mg/kg	10000	–	1000	–	2.3	1.7	7.7	3	2.2	7.9	1.5	0.66
Silver	mg/kg	10000	–	1000	–	3	1.4	28.8	6.4	4.2	8.1	0.61 B	ND
Sodium	mg/kg	–	–	–	–	1710	1200	31000	7000	3560	9740	281 B	351 B
Thallium	mg/kg	160	–	160	–	1.3	ND	1.5	1.1 B	0.89 B	2.2	1.3	1.0 B
Vanadium	mg/kg	14000	–	1400	–	24.1	6.4	6.8	12.7	13.3	24.1	21.8	26.7
Zinc	mg/kg	610000	–	61000	–	15000	10400	342000	64300	29700	63000	1070	394

		TACO Tier 1 Soil Remediation Objectives				WP-009	WP-010	WP-011	WP-012	WP-013	WP-014	WP-015	WP-016
						0 - 4	0 - 4	0 - 4	0 - 4	0 - 4	0 - 4	0 - 4	0 - 2
						6/14/2005	6/14/2005	6/14/2005	6/14/2005	6/14/2005	6/14/2005	6/14/2005	6/14/2005
		Industrial-Commercial		Construction Worker		Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site/On-Site
		Ingestion a	Inhalation b	Ingestion c	Inhalation d								
Metals	Units												
Aluminum	mg/kg	–	–	–	–	6130	4540	9660	4480	8470	4680	3770	3570
Antimony	mg/kg	820	–	82	–	3.1 B	5.5 B	1.8 B	5.9 B	2.8 B	2.6 B	2.2 B	6.0 B
Arsenic	mg/kg	13	1200	61	25000	45.4	16.9	14.4	7.0	22.6	10.8	6.4	10.0
Barium	mg/kg	140000	910000	14000	870000	565	477	278	180	634	600	216	166
Beryllium	mg/kg	4100	2100	410	44000	1.3	0.82	1.1	0.66	1.5	0.72	0.61	2.8
Cadmium	mg/kg	2000	2800	200	59000	6.3	4.7	4.7	5.9	10.2	7.8	6.8	18.5
Chromium Total	mg/kg	6100	420	4100	690	35.5	21.9	37.2	24.5	45.1	30.6	30.5	57.3
Cobalt	mg/kg	120000	–	12000	–	8.3	5.2 B	7.2	3.7 B	8.2	5.6 B	3.9 B	3.7 B
Copper	mg/kg	82000	–	8200	–	501	813	723	412	571	314	846	7340
Lead	mg/kg	800	–	700	–	1700	3030	997	718	1710	1660	1490	2020
Manganese	mg/kg	96000	91000	9600	8700	596	384	329	241	444	310	303	380
Mercury	mg/kg	610	16[3]	61	0.1[3]	1.2	1.4	0.69	0.48	1.3	0.65	1.4	0.72
Nickel	mg/kg	41000	21000	4100	440000	28.8	23.8	40.5	17.5	35.2	27.7	34.2	149
Selenium	mg/kg	10000	–	1000	–	1.8	1.3	1.5	1.1	2.1	1.6	1.3	11.8
Silver	mg/kg	10000	–	1000	–	0.94 B	1.2	0.92 B	ND	1.1 B	1.0 B	1	2.6
Sodium	mg/kg	–	–	–	–	374 B	330 B	288 B	695	660 B	388 B	617	1470
Thallium	mg/kg	160	–	160	–	1.5	0.69 B	ND	ND	1.4	0.76 B	0.57 B	0.65 B
Vanadium	mg/kg	14000	–	1400	–	26.9	17.1	20.0	13.9	28.8	17.1	14.8	11.6
Zinc	mg/kg	610000	–	61000	–	1910	2190	1730	2260	2960	2480	2960	11500

[1] Illinois Administrative Code 742, Tiered Approach to Corrective Action Objectives, Appendix B, Table B
[2] mg/kg - milligrams per kilograms
[3] Inhalation RO only applicable to elemental mercury
B - Estimated result. Result is less than reporting limit
J - Elevated reporting limit. The reporting limit is elevated due to matrix interference.

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TABLE 12

TCLP SOIL ANALYTICAL RESULTS
H. KRAMER SITE
CHICAGO, ILLINOIS

		Sample ID:	*WP-003*	*WP-004*	*WP-006*	*WP-010*	*WP-013*
		Sample Depth (inches):	*0 - 4*	*0 - 5*	*4 - 6*	*0 - 4*	*0 - 4*
		Sample Date:	*6/14/2005*	*6/14/2005*	*6/14/2005*	*6/14/2005*	*6/14/2005*
			On-Site	*On-Site*	*On-Site*	*Off-Site*	*Off-Site*
		Characteristic [1] *Criteria*					
Metals	***Units***						
Arsenic	mg/L[2]	5.0	ND (0.5)[3]	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Barium	mg/L	100.0	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)
Cadmium	mg/L	1.0	1.7	0.67	0.94	ND (0.10)	ND (0.10)
Chromium Total	mg/L	5.0	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Lead	mg/L	5.0	14.6	1.8	15.4	1.4	0.81
Selenium	mg/L	1.0	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)	ND (0.25)
Silver	mg/L	5.0	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Mercury	mg/L	0.2	ND (0.0020)	ND (0.0020)	ND (0.0020)	ND (0.0020)	ND (0.0020)

[1] 35 IAC 721.124
[2] mg/L - milligrams per liter
[3] Analyte not detected at quantitation limit stated in parentheses
Shaded value indicates an exceedence of criteria

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TABLE 13

PHASE 2 SOIL ANALYTICAL RESULTS
H. KRAMER SITE
CHICAGO, ILLINOIS

		TACO Tier 1 Soil Remediation Objectives				GP-1	GP-1	GP-1	GP-2	GP-2	GP-2	GP-3	GP-3	GP-3	GP-4	GP-7
		Industrial-Commercial		Construction Worker		S-070705-JH-003	S-070705-JH-004	S-070705-JH-005	S-070705-JH-006	S-070705-JH-007	S-070705-JH-008	S-070705-JH-027	S-070705-JH-028	S-070705-JH-029	S-070705-JH-024	S-070705-JH-037
		Ingestion	Inhalation	Ingestion	Inhalation	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005
	Units	a	b	c	d	0-0.5	3-4	5-6	0-0.5	2.5-3.5	5-6	0-0.5	2-3	5-6	0-0.5	2-3
Metals																
Antimony	mg/kg	820	--	82	--	1.3 B [3]	3.5 B	ND(7.1) U	12.7	4.6 B	ND(7.2) U	1.0 B	3.5 B	ND(7.3) U [4]	64.5	ND(7.4) U
Arsenic	mg/kg	13	1200	61	25000	1.8	67.0	2.6	7.2	3.5 B	4.0	1.7	16.0	4.3	18.5	6.8
Beryllium	mg/kg	4100	2100	410	44000	0.27 B J [5]	1.2 J	0.26 B J	2.0 J	0.34 B J	0.45 B J	0.61 J	1.4 J	0.44 B J	2.3 J	0.79 J
Cadmium	mg/kg	2000	2800	200	59000	1.8	7.1	0.17 B	14.2	0.44 B	0.22 B	0.47 B	3.1	0.24 B	10.2	0.81
Chromium Total	mg/kg	6100	420	4100	690	13.6	20.3	5.8	28.5	3.7	10.0	12.3	9.6	8.6	35.6	13.4
Copper	mg/kg	82000	--	8200	--	4690	718	5.8	6510	20.6	18.8	201 J	140 J	11.9 J	73900 J	29.2 J
Lead	mg/kg	800	--	700	--	532	1280	4.7	2700	81.5	8.7	54.6	433	6.7	4900	192
Mercury	mg/kg	610	16 [6]	61	0.1 [6]	0.030 B	1.6	ND(0.12) U	0.34	0.17	ND(0.12) U	ND(0.11) U	0.18	ND(0.12) U	0.87	0.37
Nickel	mg/kg	41000	21000	4100	440000	55.6	21.8	6.2	126	3.4 B	14.1	80.9	17.0	12.0	2130	16.2
Selenium	mg/kg	10000	--	1000	--	ND(0.51) U	1.6	ND(0.59) U	0.77	ND(1.8) U	ND(0.60) U	ND(0.54) U	ND(0.61) U	ND(0.61) U	0.93	ND(0.62) U
Silver	mg/kg	10000	--	1000	--	1.5	2.3	ND(1.2) U	2.7	ND(3.6) U	ND(1.2) U	ND(1.1) U	ND(1.2) U	ND(1.2) U	25.5	ND(1.2) U
Thallium	mg/kg	160	--	160	--	0.58 B	ND(1.3) U	ND(1.2) U	ND(1.0) U	ND(3.6) U	ND(1.2) U	ND(1.1) U	ND(1.2) U	ND(1.2) U	ND(1.1) U	ND(1.2) U
Zinc	mg/kg	610000	--	61000	--	3140	2420	23.4	15400	66.3	35.2	257 J	533 J	26.2 J	7760 J	140 J
Wet																
Total Solids	%	--	--	--	--	97.8	78.1	85.0	96.1	27.4	83.5	92.8	82.1	82.3	95.1	81.1

		TACO Tier 1 Soil Remediation Objectives				GP-4	GP-4	GP-5	GP-5	GP-5	GP-6	GP-6	GP-6	GP-7	GP-7	GP-10
		Industrial-Commercial		Construction Worker		S-070705-JH-025	S-070705-JH-026	S-070705-JH-021	S-070705-JH-022	S-070705-JH-023	S-070705-JH-018	S-070705-JH-019	S-070705-JH-020	S-070705-JH-035	S-070705-JH-036	S-070705-JH-045
		Ingestion	Inhalation	Ingestion	Inhalation	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005
	Units	a	b	c	d	2-3	5-6	0-0.5	2-3	5-6	0-0.5	2.5-3.5	5-6	0-0.5	0-0.5	5-6
Metals																
Antimony	mg/kg	820	--	82	--	0.45 B	ND(7.2) U	32.9	3.4 B	ND(7.1) U	7.3	9.0	ND(7.4) U	ND(6.3) U	0.54 B	ND(7.2) U
Arsenic	mg/kg	13	1200	61	25000	6.5	2.8	12.1	17.5	3.6	6.8	10.8	4.9	2.7	3.2	6.0
Beryllium	mg/kg	4100	2100	410	44000	0.30 B J	0.35 B J	2.6 J	1.5 J	0.34 B J	2.4 J	1.3 J	0.34 B J	1.2 J	0.95 J	0.26 B J
Cadmium	mg/kg	2000	2800	200	59000	1.1	0.26 B	26.7	11.3	0.29 B	16.7	16.6	0.26 B	2.8	2.0	0.29 B
Chromium Total	mg/kg	6100	420	4100	690	7.0	7.3	33.1	14.6	7.6	24.2	44.1	7.9 E	33.0	18.3	7.1
Copper	mg/kg	82000	--	8200	--	149 J	15.6 J	18800	168 J	20.1 J	4510	3340	13.0 E	5010 J	1610 J	7.8
Lead	mg/kg	800	--	700	--	122	7.4	4460	347	9.1	2120	2880	8.8 E	394	319	6.1
Mercury	mg/kg	610	16	61	0.1	0.65	ND(0.12) U	0.52	0.025 B	ND(0.12) U	0.31	0.59	ND(0.12) U	0.13	0.62	ND(0.12) U
Nickel	mg/kg	41000	21000	4100	440000	10.1	10.0	246	48.3	9.5	70.7	110	10.1 E	28.8	15.8	8.7
Selenium	mg/kg	10000	--	1000	--	ND(0.57) U	ND(0.60) U	0.60	ND(0.75) U	ND(0.60) U	3.7	2.4	ND(0.62) U	2.5	2.5	ND(0.60) U
Silver	mg/kg	10000	--	1000	--	ND(1.1) U	ND(1.2) U	6.8	1.2 B	ND(1.2) U	2.0	2.5	ND(1.2) U	0.64 B	0.52 B	ND(1.2) U
Thallium	mg/kg	160	--	160	--	ND(1.1) U	ND(1.2) U	ND(1.0) U	2.0	ND(1.2) U	ND(1.1) U	ND(1.1) U	ND(1.2) U	ND(1.1) U	ND(1.0) U	ND(1.2) U
Zinc	mg/kg	610000	--	61000	--	415 J	30.5 J	16900	681 J	60.1 J	10500	8960	36.5 E	3270 J	1180 J	26.8
Wet																
Total Solids	%	--	--	--	--	87.8	83.7	96.9	66.9	83.9	93.5	89.1	81.1	94.7	95.5	83.5

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TABLE 13

PHASE 2 SOIL ANALYTICAL RESULTS
H. KRAMER SITE
CHICAGO, ILLINOIS

		TACO Tier 1 Soil Remediation Objectives				GP-7	GP-8	GP-8	GP-8	GP-9	GP-9	GP-9	GP-10	GP-10	GP-14	GP-14
		Industrial-Commercial		Construction Worker		S-070705-JH-038	S-070705-JH-040	S-070705-JH-041	S-070705-JH-042	S-070705-JH-046	S-070705-JH-047	S-070705-JH-048	S-070705-JH-043	S-070705-JH-044	S-070705-JH-015	S-070705-JH-016
		Ingestion	Inhalation	Ingestion	Inhalation	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005
	Units	a	b	c	d	5-6	0-0.5	2-3	5-6	0-0.5	2-3	5-6	0-0.5	2-3	2.5-3.5	5-6
Metals																
Antimony	mg/kg	820	--	82	--	ND(7.5) U	22.2	1.1 B	ND(7.2) U	1.1 B	6.0 B	ND(7.5) U	0.46 B	0.57 B	2.6 B	2.4 B
Arsenic	mg/kg	13	1200	61	25000	3.4	5.0	5.9	6.3	3.3	31.1	3.3	2.1	3.8	11.7	4.3
Beryllium	mg/kg	4100	2100	410	44000	0.48 B J	6.3 J	0.54 B J	0.53 B J	2.5 J	1.0 J	0.27 B J	1.1 J	0.69 J	0.74 J	0.43 B J
Cadmium	mg/kg	2000	2800	200	59000	0.26 B	13.2	0.70	0.23 B	7.1	5.8	0.23 B	1.3	0.46 B	20.5	0.34 B
Chromium Total	mg/kg	6100	420	4100	690	9.8	153	8.0	13.9	23.1	21.4	7.7	13.6	11.3	995	10.1
Copper	mg/kg	82000	--	8200	--	16.3 J	27000 J	44.3 J	17.4	3410	420	10	13400	36.2 J	352	21.8
Lead	mg/kg	800	--	700	--	10.4	4540	95.7	12.9	1410	525	6.1	242	664	8290	51.6
Mercury	mg/kg	610	16 [6]	61	0.1 [6]	0.018 B	0.94	0.55	ND(0.12) U	0.14	0.73	ND(0.12) U	ND(0.10) U	0.59	1.4	ND(0.12) U
Nickel	mg/kg	41000	21000	4100	440000	13.9	196	6.5	20.1	36.5	42.8	8.5	18.5	9.4	8.5	14.1
Selenium	mg/kg	10000	--	1000	--	ND(0.62) U	27.8	15.6	ND(0.60) U	5.3	10.4	ND(0.62) U	0.62	0.37 B	ND(0.60) U	ND(0.59) U
Silver	mg/kg	10000	--	1000	--	ND(1.2) U	8.1	ND(1.2) U	ND(1.2) U	1.1	ND(2.6) U G	ND(1.2) U	0.97 B	ND(1.1) U	ND(1.2) U	ND(1.2) U
Thallium	mg/kg	160	--	160	--	ND(1.2) U	ND(1.0) U	1.2	ND(1.2) U	ND(1.0) U	ND(2.6) U G	ND(1.2) U	ND(1.0) U	ND(1.1) U	0.75 B	ND(1.2) U
Zinc	mg/kg	610000	--	61000	--	41.1 J	12100 J	79.7 J	38.9	5160	1710	30.1	1180	37.6 J	30200	55.8
Wet																
Total Solids	%	--	--	--	--	80.3	96.5	85.8	83.8	95.5	76.4	80.4	96.9	87.0	82.7	85.2

		TACO Tier 1 Soil Remediation Objectives				GP-11	GP-11	GP-12	GP-12	GP-12	GP-13	GP-13	GP-14	GP-14	S-3	S-4
		Industrial-Commercial		Construction Worker		S-070705-JH-033	S-070705-JH-034	S-070705-JH-030	S-070705-JH-031	S-070705-JH-032	S-070705-JH-011	S-070705-JH-012	S-070705-JH-013	S-070705-JH-014	S-070805-JH-053	S-070805-JH-054
		Ingestion	Inhalation	Ingestion	Inhalation	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/7/2005	7/8/2005	7/8/2005
	Units	a	b	c	d	2-3	5-6	0-0.5	2-3	5-6	2.5-3.5	5-6	0-0.5	0-0.5	0-0.5	0-0.5
Metals																
Antimony	mg/kg	820	--	82	--	0.41 B	ND(7.0) U	ND(6.2) U	8.5 B	ND(7.1) U	19.7	163	473	2330	1.0 B	ND(6.7) U
Arsenic	mg/kg	13	1200	61	25000	1.5	4.9	1.1	13.7	3.8	10.2	30.9	66.6	211	5.7	4.8
Beryllium	mg/kg	4100	2100	410	44000	0.19 B J	0.55 B J	0.31 B J	0.85 J	0.35 B J	1.3 J	1.4 J	0.97 J	1.2 J	2.0 J	0.59 J
Cadmium	mg/kg	2000	2800	200	59000	0.093 B	0.38 B	2.0	9.0	0.27 B	5.6	2.4	27.9	27.9	2.4	1.6
Chromium Total	mg/kg	6100	420	4100	690	2.7	13.2	6.4	32.2	7.9	20.4	13.4	80.9	102	13.7	27.5
Copper	mg/kg	82000	--	8200	--	5.7 J	22.8 J	299 J	216 J	8.6 J	5290	79.3	10200	7090	140 J	95.7 J
Lead	mg/kg	800	--	700	--	9.4	10.5	243	730	6.0	1630	1270	6530	22800	135 J	143 J
Mercury	mg/kg	610	16	61	0.1	ND(0.11) U	ND(0.12) U	0.11	0.52	ND(0.12) U	1.5	1.5	1.9	2.4	0.14	0.23
Nickel	mg/kg	41000	21000	4100	440000	2.7 B	22.6	10.4	28.7	8.5	63.7	20.6	114	191	17.0	26.1
Selenium	mg/kg	10000	--	1000	--	ND(0.55) U	ND(0.58) U	ND(0.52) U	ND(1.5) U G	ND(0.59) U	1.6	ND(0.90) U	ND(11.3) U G	ND(10.8) U G	ND(0.51) U	ND(0.56) U
Silver	mg/kg	10000	--	1000	--	ND(1.1) U	ND(1.2) U	ND(1.0) U	ND(3.0) U G	ND(1.2) U	1.9	ND(1.8) U	34.0	37.2	ND(1.0) U	ND(1.1) U
Thallium	mg/kg	160	--	160	--	ND(1.1) U	ND(1.2) U	ND(1.0) U	ND(3.0) U G	ND(1.2) U	ND(1.2) U	ND(1.8) U	ND(22.5) U G	ND(21.6) U G	ND(1.0) U	0.63 B
Zinc	mg/kg	610000	--	61000	--	20.8 J	38.3 J	1120 J	1060 J	33.6 J	4890	365	4470	6140	536	300
Wet																
Total Solids	%	--	--	--	--	90.8	86.2	96.5	66.6	84.6	81.3	55.4	88.7	92.6	97.1	89.6

[1] mg/kg - milligrams per kilogram
[2] Sample depth feet below ground surface
[3] B - Estimated result.
[4] ND( )U - Analyte not detected at quantitation limit stated in parentheses.
[5] J - Elevated reporting limit due to matrix interferences.
[6] Inhalation RO only applicable to elemental mercury.
TACO 35 Illinois Administrative Code 742 Tiered Approach to Corrective Action Objectives

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TABLE 14

ADDITIONAL SOIL SAMPLING ANALYTICAL RESULTS
SOUTHWEST PARKING LOT AREA
H. KRAMER SITE
CHICAGO, ILLINOIS

			TACO Tier 1 Soil Remediation Objectives				GP-18	GP-18	GP-19	GP-19	GP-20
							S-011006-WP-079	S-011006-WP-080	S-011006-WP-082	S-011006-WP-083	S-011006-WP-084
		Characteristic [1]	Industrial-Commercial		Construction Worker		1/10/2006	1/10/2006	1/10/2006	1/10/2006	1/10/2006
		Criteria	Ingestion	Inhalation	Ingestion	Inhalation	0.3-0.5	1.5-2.0	0.3-0.6	1.5-2.0	0.3-0.6
Total Metals	*Units*										
Lead	mg/kg[2]	-	800	--	700	--	342	395	248	215	143
TCLP Metals											
Lead	mg/L[4]	5.0	--	--	--	--	ND (0.5)[3]	ND (0.5)	ND (0.5)	ND (0.5)	0.53

			TACO Tier 1 Soil Remediation Objectives				GP-20	GP-20	GP-21	GP-21	GP-21
							S-011006-WP-085	S-011006-WP-086	S-011006-WP-087	S-011006-WP-088	S-011006-WP-089
		Characteristic [1]	Industrial-Commercial		Construction Worker		1/10/2006	1/10/2006	1/10/2006	1/10/2006	1/10/2006
		Criteria	Ingestion	Inhalation	Ingestion	Inhalation	1.5-2.0	6.0-6.5	0.3-0.6	2.5-3.0	2.5-3.0
Total Metals	*Units*										
Lead	mg/kg[2]	-	800	--	700	--	378	18.5	8590	2140	3790
TCLP Metals											
Lead	mg/L[4]	5.0	--	--	--	--	0.74	ND(0.5)	181	1.8	1.5

[1] 35 IAC 721.124
[2] mg/kg - milligrams per kilogram
[3] Analyte not detected at quantitation limited stated in parentheses
[4] mg/L - milligrams per liter

TABLE 15

PHASE 4 SOIL ANALYTICAL RESULTS
H. KRAMER
CHICAGO, ILLINOIS

Sample Location	*Sample Identifier*	*Sample Depth (ft bgs)* [1]	*pH*	*Total Organic Carbon (mg/kg)* [2]
MW-1	S-052107-SP-03	10	7.9	3,800
MW-2	S-050707-SP-01	10	7.7	1,900
MW-3	S-052107-SP-04	10	7.9	3,500
MW-5	S-050707-SP-02	9.5	7.9	1,800

[1]ft bgs - feet below ground surface
[2]mg/kg - milligrams per kilogram

CRA 039826 (6)

TABLE 16

GROUNDWATER ANALYTICAL RESULTS
H. KRAMER
CHICAGO, ILLINOIS

Well Identifier	*Sample Number*	*Sample Date*	*QA/QC*[1]	*Lead Concentration (mg/L)*[2]
MW-1	GW-060107-WP-010	6/1/2007	--	ND
MW-2	GW-060107-WP-005	6/1/2007	--	ND
MW-3	GW-060107-WP-007	6/1/2007	--	ND
MW-3	GW-060107-WP-008	6/1/2007	Duplicate	ND
MW-4	GW-060107-WP-009	6/1/2007	--	0.003
MW-5	GW-060107-WP-006	6/1/2007	--	0.018
MW-5	GW-060107-WP-006[3]	6/1/2007	--	0.017

[1]QA/QC - Quality Assurance/Quality Control
[2]mg/L - milligrams per liter
[3]Sample Reanalyzed

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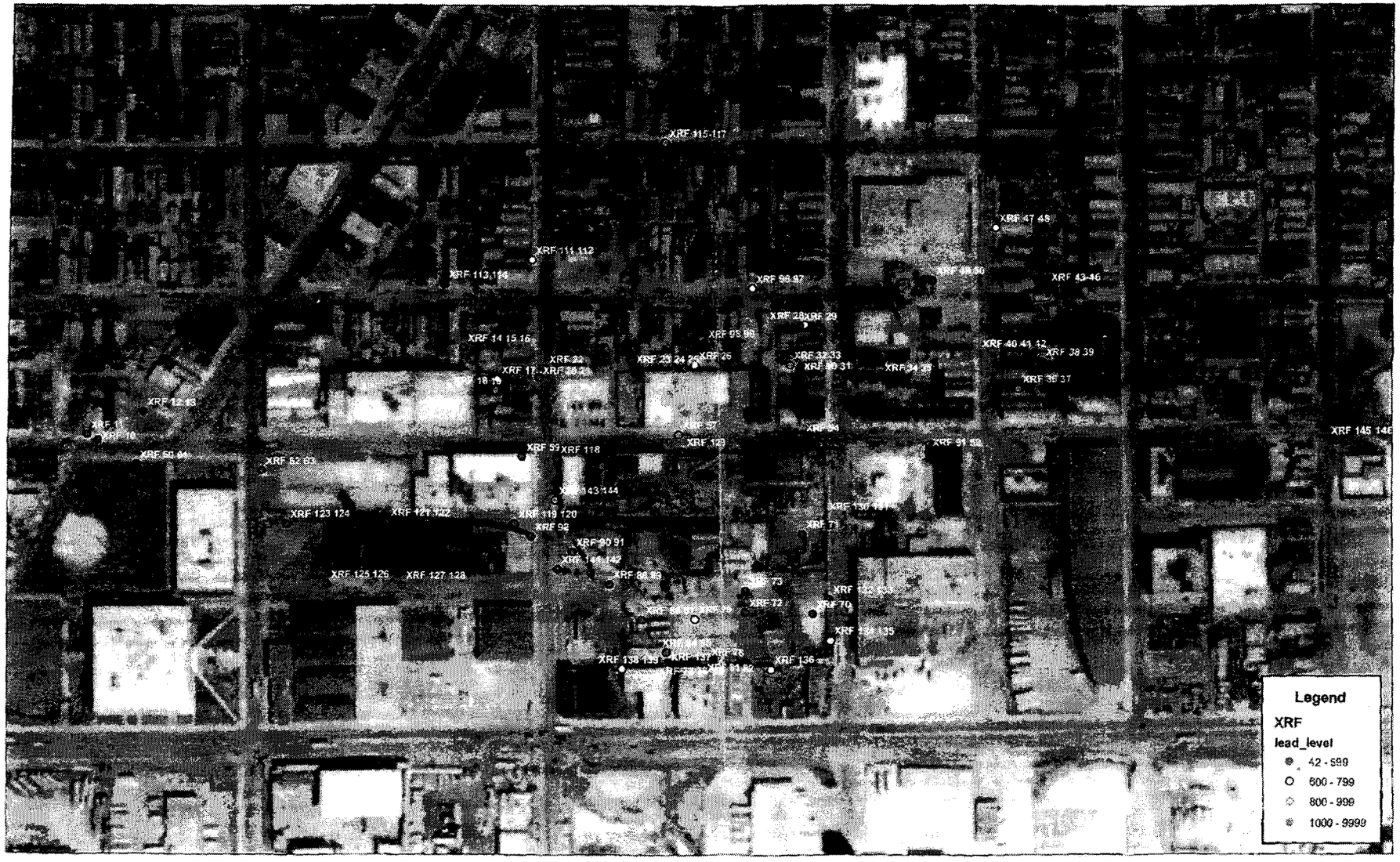
APPENDIX A

ILLINOIS EPA'S XRF SOIL SCREENING RESULTS

XRF Labeled



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HK 01172

Serial #XL700-U971MI929
BULK

Site: H. Kramer & Co.
XRF Screening Locations and Results
Collected in surrounding neighborhood

	Reading No.	Seconds	Date/Time	Mo	Zr	Sr	Rb	Pb	Se	As	Hg	Zn	Cu	Ni	Co	Fe	Mn	Cr
Calibration	4	19.6	6/13/2005 11:39	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
and	5	60.3	6/13/2005 11:40	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	126.1	<LOD	<LOD
Self test	6	61	6/13/2005 11:42	34.4	110.3	339.2	247.6	5440	<LOD	653.2	<LOD	7116.8	3169.6	<LOD	<LOD	33689.6	11296	<LOD
	7	62.2	6/13/2005 11:45	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

	Reading No.	Seconds	Date/Time	Mo	Zr	Sr	Rb	Pb	Se	As	Hg	Zn	Cu	Ni	Co	Fe	Mn	Cr
In neighborhood																		
1530 W. 21st St. (backyard)	8	60.5	6/13/2005 12:09	14.9	180.9	61	87.3	102.5	<LOD	<LOD	<LOD	232.4	<LOD	<LOD	<LOD	12396.8	430	318.6
Backyard	9	61.2	6/13/2005 12:13	<LOD	77.7	72	74.9	506.8	<LOD	54.1	<LOD	2148.8	147.5	382.2	<LOD	14092.8	<LOD	<LOD
Front Tree Pit	10	60.8	6/13/2005 12:22	<LOD	66.4	52.3	56.9	294.4	<LOD	<LOD	<LOD	644.8	<LOD	<LOD	<LOD	10099.2	<LOD	<LOD
1532 W. 21st St. (frontyard)	11	35.3	6/13/2005 12:28	<LOD	88.2	68.5	70.5	1000	<LOD	<LOD	<LOD	734.4	<LOD	<LOD	<LOD	16993.6	<LOD	<LOD
NW corner Blue Island & 21st	12	30.7	6/13/2005 12:34	<LOD	63.1	55.3	73.1	326.8	<LOD	<LOD	<LOD	938.4	<LOD	<LOD	<LOD	20595.2	<LOD	<LOD
at 4" horizon	13	31	6/13/2005 12:39	<LOD	70.7	184.1	97.7	238.6	<LOD	<LOD	<LOD	272.4	156.6	328	<LOD	26393.6	<LOD	<LOD
1415 W. Cullerton (backyard)	14	30.9	6/13/2005 12:51	<LOD	79.6	85.1	48.2	1249.6	<LOD	<LOD	<LOD	1320	455.6	<LOD	<LOD	17190.4	<LOD	<LOD
4" below bricks	15	31.7	6/13/2005 12:53	<LOD	68.3	97.9	79.6	1309.6	<LOD	<LOD	<LOD	1809.6	443.6	532.4	<LOD	22796.8	<LOD	<LOD
on top of bricks	16	28	6/13/2005 12:56	<LOD	109.3	75.6	76.6	828	<LOD	<LOD	<LOD	1109.6	<LOD	<LOD	<LOD	20492.8	<LOD	<LOD
2014 S. Loomis (backyard)	17	31	6/13/2005 13:04	<LOD	77.2	73.7	60.9	742	<LOD	<LOD	<LOD	1180	330	<LOD	<LOD	13593.6	<LOD	<LOD
2016 S. Loomis (backyard)	18	30.3	6/13/2005 13:08	<LOD	72.5	67.9	54.1	952.8	<LOD	<LOD	<LOD	1849.6	380.8	323	<LOD	15692.8	<LOD	<LOD
at 4" horizon	19	30.7	6/13/2005 13:10	<LOD	90.6	82.4	81.8	927.2	<LOD	<LOD	<LOD	1360	386.8	<LOD	<LOD	17088	<LOD	608.4
2014 S. Loomis (front-city R.O.W.)	20	30.2	6/13/2005 13:15	26.4	59.8	99	48.6	1260	<LOD	<LOD	<LOD	2779.2	888.8	1720	<LOD	22092.8	<LOD	1149.6
at 4" horizon	21	30	6/13/2005 13:18	<LOD	84.4	69.7	81.9	951.2	<LOD	<LOD	<LOD	1580	721.2	449.2	<LOD	20288	<LOD	<LOD
2011 S. Loomis (frontyard)	22	31	6/13/2005 13:22	<LOD	82.5	100	66.8	2139.2	<LOD	<LOD	<LOD	2569.6	995.2	<LOD	<LOD	24396.8	<LOD	587.6
1331 W. Cullerton (backyard)	23	30.5	6/13/2005 13:38	<LOD	72.8	205.2	86.3	1280	<LOD	<LOD	<LOD	3459.2	653.2	5798.4	<LOD	24588.8	<LOD	1049.6
at 4" horizon	24	30.7	6/13/2005 13:41	<LOD	80.7	179.5	76	2979.2	<LOD	<LOD	<LOD	3987.2	541.6	4598.4	<LOD	21094.4	<LOD	<LOD
Worn paint on garage	25	30.2	6/13/2005 13:43	23	<LOD	<LOD	<LOD	39577.6	<LOD	5859.2	182.5	25996.8	<LOD	3108.8	<LOD	7238.4	<LOD	2880
Backyard	26	31	6/13/2005 13:46	<LOD	20	48.5	49.7	614	<LOD	<LOD	<LOD	2849.6	537.6	3459.2	<LOD	11097.6	<LOD	887.2
identical reading as #26	27	31	6/13/2005 13:57	<LOD	20	48.5	49.7	614	<LOD	<LOD	<LOD	2849.6	537.6	3459.2	<LOD	11097.6	<LOD	887.2
2002 S. Throop (vacant lot)	28	30.3	6/13/2005 13:57	<LOD	77.9	97.5	106	773.2	<LOD	<LOD	<LOD	3427.2	459.2	<LOD	<LOD	15488	<LOD	<LOD
at 4" horizon	29	30.7	6/13/2005 14:03	<LOD	102.7	89.7	89.2	332	<LOD	<LOD	<LOD	1220	241.4	<LOD	<LOD	17689.6	<LOD	622
2012 S. Throop (backyard)	30	30.9	6/13/2005 14:09	<LOD	86.3	50.8	64.1	1120	<LOD	<LOD	<LOD	6886.4	2028.8	<LOD	<LOD	17292.8	<LOD	1249.6
at 4" horizon	31	29.8	6/13/2005 14:14	<LOD	66.4	80.3	73.5	350.6	<LOD	<LOD	<LOD	892.8	288.2	<LOD	<LOD	10995.2	<LOD	<LOD
2010 S. Throop (backyard)	32	31.1	6/13/2005 14:19	<LOD	69	92.4	112.1	828	<LOD	<LOD	<LOD	3318.4	596	<LOD	<LOD	21094.4	<LOD	<LOD
at 4" horizon	33	31.8	6/13/2005 14:21	<LOD	70	112.2	62.9	864	<LOD	<LOD	<LOD	1180	434	385.6	<LOD	65792	<LOD	<LOD
2015 S. Throop (lot south)	34	31	6/13/2005 14:34	<LOD	59.8	44.5	74.3	298.4	<LOD	<LOD	<LOD	1680	435.2	540.4	<LOD	10796.8	644.4	<LOD
at 4" horizon	35	30.3	6/13/2005 14:37	<LOD	97.8	59.9	113.6	50	<LOD	<LOD	<LOD	197.8	<LOD	1500	<LOD	14894.4	<LOD	953.6
2015 S. Allport (lot south)	36	30.7	6/13/2005 15:01	<LOD	89.8	88.1	103.8	873.6	<LOD	<LOD	<LOD	2120	338.2	613.6	<LOD	16192	<LOD	<LOD
at 4" horizon	37	30.9	6/13/2005 15:03	<LOD	121.1	84.3	90.4	592.8	<LOD	<LOD	<LOD	1260	260.4	<LOD	<LOD	15091.2	<LOD	558.4
2011 S. Allport (backyard)	38	30.3	6/13/2005 15:34	<LOD	102.7	75.7	73.7	138.1	<LOD	<LOD	<LOD	350.6	<LOD	958.4	<LOD	12096	<LOD	<LOD
at 4" horizon	39	30.4	6/13/2005 15:36	<LOD	123.6	41.5	100.8	74.5	<LOD	<LOD	<LOD	157.2	<LOD	522	602.8	13388.8	<LOD	734
2007 S. Allport (backyard)	40	30.8	6/13/2005 15:44	<LOD	60.8	65.7	62	1109.6	<LOD	<LOD	<LOD	2228.8	329.2	<LOD	<LOD	13388.8	<LOD	<LOD
at 4" horizon	41	30.6	6/13/2005 15:46	<LOD	72.3	108.5	85.7	1180	<LOD	<LOD	<LOD	2680	420	<LOD	<LOD	22489.6	<LOD	<LOD
at 6" horizon	42	30.8	6/13/2005 15:49	<LOD	74.2	120	79.2	744	<LOD	<LOD	<LOD	1540	441.6	<LOD	<LOD	17600	<LOD	<LOD
1927 S. Allport (backyard-garden)	43	31.1	6/13/2005 16:00	<LOD	64.2	86.3	94.1	1649.6	<LOD	<LOD	<LOD	2320	344.6	<LOD	<LOD	18692.8	<LOD	<LOD
at 4" horizon	44	29.8	6/13/2005 16:02	<LOD	48.2	74.7	68.9	1200	<LOD	<LOD	<LOD	1680	284	<LOD	<LOD	11897.6	<LOD	<LOD
outside of garden in grass	45	30.3	6/13/2005 16:05	<LOD	88.6	57.9	66.4	318.6	<LOD	<LOD	<LOD	691.6	<LOD	<LOD	<LOD	10496	<LOD	<LOD
at 4" horizon	46	29.8	6/13/2005 16:07	<LOD	40.6	63.5	61.2	1009.6	<LOD	112.3	<LOD	2179.2	333.6	<LOD	<LOD	9996.8	<LOD	<LOD
1913 S. Allport (frontyard)	47	31.1	6/13/2005 16:16	<LOD	68	24.8	75.1	102.8	<LOD	<LOD	<LOD	212.8	<LOD	<LOD	<LOD	7347.2	<LOD	<LOD
at 4" horizon	48	29.9	6/13/2005 16:18	<LOD	93.4	86.7	81.1	604.8	<LOD	<LOD	<LOD	899.2	257.2	<LOD	<LOD	13798.4	<LOD	<LOD
Kominsky-Perez School (play area)	49	31	6/13/2005 16:29	<LOD	<LOD	<LOD	<LOD	41.9	<LOD	<LOD	<LOD	369.2	131.7	<LOD	<LOD	1420	<LOD	<LOD
at 4" horizon	50	32.7	6/13/2005 16:31	8.8	<LOD	<LOD	8.1	<LOD	<LOD	<LOD	<LOD	43.2	53.3	<LOD	<LOD	462.4	<LOD	<LOD
R.O.W. west of Allport on 21st. St.	51	30.9	6/13/2005 16:49	19.2	42.8	87.5	55.7	1109.6	<LOD	<LOD	<LOD	4208	1580	<LOD	<LOD	17292.8	<LOD	<LOD
at 4" horizon	52	30.6	6/13/2005 16:51	<LOD	60.1	104.4	86.1	2569.6	<LOD	<LOD	<LOD	6400	1689.6	<LOD	<LOD	30387.2	<LOD	<LOD
R.O.W. SE corner Throop & 21st. St	53	30.4	6/13/2005 16:56	<LOD	47.4	81.2	47.3	670.4	<LOD	<LOD	<LOD	4080	1349.6	763.6	<LOD	17689.6	<LOD	888.8
SW corner Throop & 21st. St.	54	30.7	6/13/2005 17:18	25.2	43.4	133.7	70.3	1580	28.6	<LOD	<LOD	18099.2	7699.2	<LOD	<LOD	24499.2	1009.6	758.8
NW corner Throop & 21st. St	55	30.6	6/13/2005 17:24	<LOD	23.2	86	33.4	712	<LOD	136.4	<LOD	2840	<LOD	<LOD	<LOD	10598.4	<LOD	<LOD
NE corner Throop & 21st. St.	56	30.5	6/13/2005 17:27	<LOD	34.5	278.6	43.8	241.4	<LOD	<LOD	<LOD	3160	<LOD	<LOD	<LOD	10195.2	<LOD	694.8
1314 W. 21st. St. on concrete sill	57	30.7	6/13/2005 17:31	<LOD	<LOD	167.3	<LOD	891.2	<LOD	179.2	<LOD	1100	288.2	<LOD	<LOD	3948.8	<LOD	896
R.O.W. NW corner Loomis & 21st. St.	58	31.9	6/13/2005 17:36	<LOD	88.2	98.7	81.5	1769.6	<LOD	<LOD	<LOD	2748.8	1040	714.8	<LOD	29977.6	<LOD	<LOD
at 4" horizon	59	31	6/13/2005 17:40	<LOD	93.5	98.4	68.5	343.6	<LOD	<LOD	<LOD	1380	512.8	<LOD	<LOD	17600	<LOD	488.4
Juarez Academy north edge sports field	60	31	6/13/2005 18:04	<LOD	128.5	58.7	104.1	185.8	<LOD	<LOD	<LOD	2000	<LOD	<LOD	<LOD	18188.8	<LOD	<LOD
at 4" horizon	61	30.8	6/13/2005 18:06	<LOD	154.6	48.3	148.9	29.5	<LOD	<LOD	<LOD	158.2	<LOD	440.4	452	17792	<LOD	<LOD
Bus stop NE corner Laflin & 21st. St.	62	30.4	6/13/2005 18:13	<LOD	48.5	68.8	61.3	187.8	<LOD	<LOD	<LOD	382.2	<LOD	<LOD	<LOD	13696	<LOD	<LOD
at 2" horizon	63	31.1	6/13/2005 18:15	<LOD	86.7	92.1	88.8	388.8	<LOD	<LOD	<LOD	381.6	<LOD	311.2	<LOD	12294.4	<LOD	<LOD

- Readings collected from soil surface either on bare soil or just beneath sod, unless otherwise noted.
- Horizontal grid lines on Table separate XRF screening locations.
- <LOD indicates "below level of detection".

Site: H. Kramer & Co.

XRF Screening Locations and Results

Collected on H. Kramer property

	Reading No.	Seconds	Date/Time	Mo	Zr	Sr	Rb	Pb	Se	As	Hg	Zn	Cu	Ni	Co	Fe	Mn	Cr
Calibration	64	19.7	6/14/2005 9:23	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
and	65	62.2	6/14/2005 9:24	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	117.4	<LOD	<LOD
Self test	66	60.4	6/14/2005 9:26	27.5	117.4	345	269.8	5388.8	<LOD	664	45.8	7116.8	3120	<LOD	<LOD	34099.2	11795.2	<LOD
	67	45.9	6/14/2005 9:29	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

	Reading No.	Seconds	Date/Time	Mo	Zr	Sr	Rb	Pb	Se	As	Hg	Zn	Cu	Ni	Co	Fe	Mn	Cr
H. Kramer Property																		
SE corner main lot	68	30.8	6/14/2005 10:02	<LOD	68.3	111.2	44.5	1788.8	<LOD	<LOD	<LOD	8819.2	2920	<LOD	<LOD	25792	<LOD	<LOD
at 5" horizon	69	30.6	6/14/2005 10:07	<LOD	73.3	124.7	64.8	2809.6	<LOD	<LOD	<LOD	11699.2	4057.6	<LOD	<LOD	37990.4	<LOD	<LOD
North portion of old east lot	70	30.2	6/14/2005 10:24	<LOD	<LOD	91.9	<LOD	3369.6	<LOD	<LOD	<LOD	121958.4	5548.8	<LOD	<LOD	17689.6	<LOD	<LOD
Adjacent to coke storage area	71	29.7	6/14/2005 10:31	<LOD	28.6	100.2	<LOD	2680	<LOD	<LOD	<LOD	18188.8	10400	<LOD	<LOD	12998.4	<LOD	3369.6
Main lot south of zinc oxide baghouse	72	31	6/14/2005 10:35	<LOD	88.8	157	70.9	1429.6	<LOD	<LOD	<LOD	7136	3417.6	<LOD	<LOD	42598.4	1469.6	<LOD
Concrete apron at zinc oxide baghouse	73	30.5	6/14/2005 10:39	48.5	<LOD	189	<LOD	18995.2	<LOD	<LOD	<LOD	433766.4	7174.4	2189.6	<LOD	22400	<LOD	3929.6
Main lot central southeast	74	30.2	6/14/2005 10:45	<LOD	54.1	110.1	60.6	2019.2	<LOD	<LOD	<LOD	34892.8	2969.6	680.4	<LOD	33484.8	<LOD	<LOD
at 3" horizon	75	31.2	6/14/2005 10:49	<LOD	68.4	114.6	62.8	2969.6	<LOD	<LOD	<LOD	18099.2	5859.2	<LOD	<LOD	26188.8	1329.6	719.2
Main lot central southwest	76	30.5	6/14/2005 10:53	<LOD	64.8	165	<LOD	18291.2	<LOD	<LOD	<LOD	231833.6	10496	<LOD	<LOD	46796.8	<LOD	<LOD
at 6" - 8" horizon (med. grey chunks)	77	33.7	6/14/2005 11:00	600	<LOD	968	<LOD	222822.4	<LOD	<LOD	<LOD	4679270.5	<LOD	27699.2	<LOD	92057.6	<LOD	24192
same horizon (med. grey granules)	78	30.2	6/14/2005 11:03	188.2	<LOD	418	<LOD	95180.8	<LOD	<LOD	<LOD	1718681.6	29286.4	11296	<LOD	54374.4	<LOD	<LOD
Main lot central north	79	30.7	6/14/2005 11:08	<LOD	29.4	82.7	44.5	626.4	<LOD	<LOD	<LOD	4448	1939.2	<LOD	<LOD	18188.8	<LOD	<LOD
Material from inside old flue line	80	30.9	6/14/2005 11:12	83.2	<LOD	184	<LOD	21888	<LOD	<LOD	<LOD	286924.8	10297.6	3308.8	10694.4	561971.2	<LOD	<LOD
Main lot 8' west of XRF 76-78 (at 11" deep)	81	30.8	6/14/2005 11:19	<LOD	64.1	111.8	74.3	3228.8	<LOD	<LOD	<LOD	20595.2	3259.2	646.8	<LOD	37478.4	<LOD	1080
at 14" horizon	82	30.7	6/14/2005 11:26	32.5	208.6	219.2	51.6	1489.6	<LOD	<LOD	<LOD	7456	1748.8	1320	<LOD	32793.6	<LOD	1349.6
Piece of copper	83	31.8	6/14/2005 11:31	1680	<LOD	1360	<LOD	<LOD	<LOD	<LOD	3280	<LOD	10061414.4	2188902.5	<LOD	167936	<LOD	<LOD
Main lot SW portion	84	25.6	6/14/2005 11:36	30.3	29.3	92.6	44.1	1569.6	<LOD	<LOD	<LOD	9465.6	3120	1129.6	<LOD	21696	<LOD	2520
at 6" horizon	85	30.9	6/14/2005 11:40	<LOD	31.4	141.4	<LOD	7955.2	<LOD	<LOD	<LOD	118988.8	12198.4	1349.6	<LOD	42393.6	<LOD	2200
Main lot NW near entry gate	86	30.8	6/14/2005 11:45	<LOD	54.9	107.3	67.2	1020	<LOD	<LOD	<LOD	7046.4	2089.6	<LOD	<LOD	22592	<LOD	<LOD
at 5" horizon	87	30.6	6/14/2005 11:50	<LOD	58.5	144	71.5	1788.8	<LOD	<LOD	<LOD	8006.4	3160	731.6	<LOD	23897.6	812	1380
Outside entry gate south of building	88	30.3	6/14/2005 11:56	<LOD	51.2	176.8	55.5	11795.2	<LOD	<LOD	121.3	61184	8684.8	<LOD	<LOD	32793.6	1340	2148.8
at 6" horizon	89	31	6/14/2005 12:00	<LOD	42.4	105.8	54.3	3699.2	<LOD	<LOD	91.8	29798.4	6796.8	790.4	<LOD	23398.4	2068.8	1100
Under steam stack SW side of bldg.	90	30.9	6/14/2005 12:05	<LOD	<LOD	266.8	<LOD	43596.8	<LOD	<LOD	<LOD	202956.8	34176	2640	<LOD	32000	3459.2	<LOD
at 6" - 8" horizon	91	30.6	6/14/2005 12:10	69.2	68.6	115.9	84.9	12800	<LOD	<LOD	<LOD	183910.4	27494.4	3249.6	<LOD	97075.2	<LOD	4457.6

- Readings collected from soil surface either on bare soil or just beneath sod, unless otherwise noted.
- Horizontal grid lines on Table separate XRF screening locations.
- <LOD indicates "below level of detection".

HK 01173

Site: H. Kramer & Co.

XRF Screening Locations and Results

Collected in surrounding neighborhood

	Reading No.	Seconds	Date/Time	Mo	Zr	Sr	Rb	Pb	Se	As	Hg	Zn	Cu	Ni	Co	Fe	Mn	Cr
In neighborhood																		
West of Kramer in R.R. siding area	92	30.9	6/14/2005 12:13	<LOD	148	70.5	140.2	153.1	<LOD	<LOD	<LOD	770.4	<LOD	<LOD	<LOD	15296	<LOD	443.6

	Reading No.	Seconds	Date/Time	Mo	Zr	Sr	Rb	Pb	Se	As	Hg	Zn	Cu	Ni	Co	Fe	Mn	Cr
Calibration	93	19.7	6/14/2005 18:14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
and	94	61.7	6/14/2005 18:15	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	157.2	<LOD	<LOD
Self test	95	63.4	6/14/2005 18:17	27.4	102.2	321.2	239.4	5228.8	<LOD	675.6	37	6707.2	3049.6	285.6	<LOD	32588.8	9996.8	<LOD

	Reading No.	Seconds	Date/Time	Mo	Zr	Sr	Rb	Pb	Se	As	Hg	Zn	Cu	Ni	Co	Fe	Mn	Cr
In neighborhood																		
1316 W. Cullerton (backyard garden)	96	30.9	6/14/2005 18:23	19.6	102.3	85	73.5	661.6	<LOD	<LOD	<LOD	1489.6	295.2	<LOD	<LOD	13990.4	<LOD	704.8
at 4" horizon	97	30.4	6/14/2005 18:26	<LOD	64.9	62.4	80.8	899.2	<LOD	<LOD	<LOD	1240	257.6	<LOD	<LOD	14489.6	<LOD	<LOD
1329 W. Cullerton (backyard garden)	98	30.6	6/14/2005 18:36	<LOD	47.9	81.3	84	1069.6	<LOD	<LOD	<LOD	2908.8	883.6	<LOD	<LOD	13491.2	<LOD	<LOD
at 4" horizon	99	31.6	6/14/2005 18:38	<LOD	78.1	82.7	71.2	1420	<LOD	<LOD	<LOD	3747.2	1120	<LOD	<LOD	18099.2	<LOD	<LOD
1342 W. Cullerton (frontyard)	100	30.7	6/14/2005 18:50	<LOD	59.2	48	58.5	450	<LOD	<LOD	<LOD	814	157.1	<LOD	<LOD	8544	<LOD	<LOD
at 4" - 5" horizon	101	30.2	6/14/2005 18:53	20.3	70.1	88.3	83.2	1620	<LOD	<LOD	<LOD	2129.6	387.8	515.2	<LOD	25689.6	<LOD	1149.6
1330 W. Cullerton (bare front play area)	102	31.2	6/14/2005 18:59	29.4	78.4	69.7	80.4	793.6	<LOD	<LOD	<LOD	2419.2	535.6	731.6	<LOD	18393.6	<LOD	690
at 5" horizon	103	31.2	6/14/2005 19:02	<LOD	65.6	66.2	57.6	1009.6	<LOD	<LOD	<LOD	2419.2	709.6	452.4	<LOD	18995.2	<LOD	<LOD
1332 W. Cullerton (soil under front porch)	104	31.7	6/14/2005 19:16	24.3	27.5	102	29	130.9	<LOD	<LOD	<LOD	888.6	<LOD	288.8	<LOD	6227.2	<LOD	1060
at 1" - 2" horizon	105	31.4	6/14/2005 19:18	<LOD	79.6	57.3	63.1	50.2	<LOD	<LOD	<LOD	269.6	<LOD	714.8	<LOD	8857.6	<LOD	574
1317 S. Loomis (bare frontyard)	106	31.2	6/14/2005 19:26	22.1	94.8	93.8	62.7	1229.6	<LOD	<LOD	<LOD	1589.6	<LOD	1260	<LOD	16089.6	<LOD	<LOD
at 4" - 5" horizon	107	32.6	6/14/2005 19:30	<LOD	86	71.2	83.6	242.6	<LOD	<LOD	<LOD	520.4	<LOD	<LOD	<LOD	56473.6	<LOD	<LOD

- Readings collected from soil surface either on bare soil or just beneath sod, unless otherwise noted.
- Horizontal grid lines on Table seperate XRF screening locations.
- <LOD indicates "below level of detection".

HK 01174

Site: H. Kramer & Co.

XRF Screening Locations and Results

Collected in surrounding neighborhood

	Reading No.	Seconds	Date/Time	Mo	Zr	Sr	Rb	Pb	Se	As	Hg	Zn	Cu	Ni	Co	Fe	Mn	Cr
Calibration	108	19.7	6/15/2005 9:16	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
and	109	60.9	6/15/2005 9:16	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	179.9	<LOD	<LOD
Self test	110	61	6/15/2005 9:19	22.2	105.4	347.4	247.6	5520	<LOD	657.2	73	7174.4	3049.6	<LOD	<LOD	33587.2	10694.4	<LOD

	Reading No.	Seconds	Date/Time	Mo	Zr	Sr	Rb	Pb	Se	As	Hg	Zn	Cu	Ni	Co	Fe	Mn	Cr
In neighborhood																		
1918 S. Loomis (frontyard)	111	30.4	6/15/2005 9:35	<LOD	70	66.7	87.6	684.4	<LOD	<LOD	<LOD	1140	<LOD	806.8	<LOD	15795.2	<LOD	<LOD
at 4" horizon	112	30.8	6/15/2005 9:37	23.9	88.1	89.9	97.9	530.8	<LOD	<LOD	<LOD	1000	292.4	1460	<LOD	18188.8	<LOD	1509.6
1420 W. Cullerton (front of empty lot)	113	31	6/15/2005 9:44	<LOD	98.4	88.4	77.1	442.4	<LOD	<LOD	<LOD	488.8	<LOD	<LOD	<LOD	9209.6	<LOD	<LOD
at 4" horizon	114	30.6	6/15/2005 9:47	<LOD	157.5	127.9	73.7	394.8	<LOD	71.9	<LOD	498.8	<LOD	827.2	<LOD	17088	<LOD	<LOD
1334 W. 19th St.	115	30.9	6/15/2005 9:57	<LOD	83.1	108.7	88.8	512	<LOD	<LOD	<LOD	569.6	<LOD	<LOD	<LOD	10598.4	<LOD	<LOD
at 4" horizon	116	31.1	6/15/2005 10:00	<LOD	72.6	120.4	67.9	806.8	<LOD	<LOD	<LOD	446.4	<LOD	297.6	<LOD	9196.8	<LOD	<LOD
1.5' north of XRF 115	117	20.7	6/15/2005 10:01	<LOD	41.3	61.7	47.6	512	<LOD	<LOD	<LOD	1100	255.4	<LOD	<LOD	7526.4	<LOD	<LOD
Dust on concrete outside NW corner Kramer	118	30.9	6/15/2005 10:09	20.2	<LOD	355.2	36.6	1699.2	<LOD	257	<LOD	10694.4	4307.2	<LOD	<LOD	11200	<LOD	1529.6
East end of R.R. R.O.W. west of Kramer	119	30.4	6/15/2005 10:15	25.6	58	77.6	<LOD	2068.8	<LOD	<LOD	<LOD	14297.6	2788.8	<LOD	<LOD	31180.8	1080	<LOD
at 3" horizon	120	30.7	6/15/2005 10:18	23.4	44.8	86.9	39.7	2539.2	<LOD	<LOD	<LOD	15091.2	4368	602.8	905.6	44800	1649.6	<LOD
R.R. R.O.W midway between Loomis & Laflin	121	30.3	6/15/2005 10:24	<LOD	71	75.6	43.1	1648.6	<LOD	<LOD	<LOD	9446.4	1400	522	<LOD	28288	1060	<LOD
at 4" horizon	122	30.4	6/15/2005 10:26	61.6	78.3	61.4	41.9	2289.6	<LOD	<LOD	<LOD	19494.4	2739.2	756	<LOD	65587.2	2148.8	1209.6
West end of R.R. R.O.W. west of Kramer	123	30.9	6/15/2005 10:30	21.2	26.6	43.9	33.7	542	<LOD	<LOD	<LOD	3000	522.8	<LOD	<LOD	18790.4	<LOD	1260
at 4" horizon	124	30.6	6/15/2005 10:32	21.7	33.5	42.9	45.4	594.8	<LOD	<LOD	<LOD	2760	704.8	<LOD	<LOD	36377.6	801.2	<LOD
West end of 1400 block of 21st Place	125	30.1	6/15/2005 10:38	23.7	19.9	77.8	45.3	323.4	<LOD	<LOD	<LOD	1849.6	<LOD	<LOD	<LOD	12096	<LOD	655.6
at 4" horizon	126	31	6/15/2005 10:41	19.6	25.4	49	52.3	363.4	<LOD	<LOD	<LOD	1609.6	424	344.6	<LOD	22297.6	<LOD	1349.6
Middle of the 1400 block of 21st Place	127	30.9	6/15/2005 10:45	20.4	33	55.8	35	369.6	<LOD	<LOD	<LOD	2388.8	357.6	<LOD	<LOD	11795.2	<LOD	390
at 3" horizon	128	30.9	6/15/2005 10:48	<LOD	39.5	71.4	60.4	476.4	<LOD	<LOD	<LOD	1760	419.2	<LOD	<LOD	15488	613.2	<LOD
Outside H.Kramer at east overhead door on 21st St.	129	30.8	6/15/2005 10:55	<LOD	<LOD	186.3	49.9	1429.6	<LOD	138.1	<LOD	19392	4588.8	546.4	<LOD	11596.8	721.2	<LOD
North portion of 2100 block S. Throop (west R.O.W.)	130	30.9	6/15/2005 11:00	<LOD	47.3	124.3	54	1180	<LOD	<LOD	<LOD	10297.6	1960	740	<LOD	14297.6	<LOD	<LOD
at 4" - 5" horizon	131	30.6	6/15/2005 11:03	<LOD	128.1	411.6	47.3	1100	<LOD	<LOD	<LOD	4307.2	1240	<LOD	<LOD	33894.4	<LOD	876
Former 21st Place driveway into Kramer (east entry)	132	30.6	6/15/2005 11:07	20.9	21.9	80.8	36	988.8	<LOD	<LOD	<LOD	8428.8	1300	<LOD	<LOD	13593.6	<LOD	488.8
at 3" - 4" horizon	133	30.6	6/15/2005 11:09	<LOD	34.9	61.8	38.2	1409.6	<LOD	<LOD	<LOD	6560	1988.8	<LOD	<LOD	17190.4	<LOD	1109.6
South portion of 2100 block S. Throop (west R.O.W.)	134	30.6	6/15/2005 11:12	<LOD	29.4	44.4	32.8	710.8	<LOD	<LOD	<LOD	7347.2	980.8	<LOD	<LOD	14489.6	<LOD	<LOD
at 5" horizon	135	29.7	6/15/2005 11:14	24.6	74.4	197.6	46.4	176.9	<LOD	<LOD	<LOD	1369.6	<LOD	<LOD	<LOD	37990.4	<LOD	<LOD
East end of alley south of H. Kramer	136	30.2	6/15/2005 11:19	24.8	25.2	80.5	49.4	682.4	<LOD	<LOD	<LOD	5040	1049.6	<LOD	<LOD	21888	<LOD	1069.6
Mid point in alley south of H. Kramer	137	30.7	6/15/2005 11:23	38.8	67.8	106.5	71.4	3299.2	<LOD	<LOD	<LOD	16089.6	4249.6	<LOD	<LOD	59852.8	<LOD	<LOD
West end of ally south of H. Kramer	138	30.5	6/15/2005 11:28	139.6	64.4	70.9	84.3	572.8	<LOD	<LOD	<LOD	2108.8	361.2	<LOD	<LOD	33177.6	<LOD	828.8
at 2" - 3" horizon	139	30.9	6/15/2005 11:30	110.9	68.8	81.9	84.1	782	<LOD	<LOD	<LOD	2160	409.2	<LOD	<LOD	35891.2	<LOD	876
Pile of dark grey material 15' east of XRF 138/139	140	30.8	6/15/2005 11:33	10694.4	<LOD	<LOD	<LOD	<LOD	<LOD	<LOD	440	1948.8	<LOD	5040	<LOD	1299251.2	<LOD	235929.6
City R.O.W. west of H. Kramer cooling tower	141	31	6/15/2005 11:38	32.1	96	112.8	46.9	1500	<LOD	<LOD	<LOD	10195.2	2400	<LOD	<LOD	28388.8	<LOD	838.4
at 2" horizon	142	29.9	6/15/2005 11:40	24.1	160.3	53.8	144.4	151.7	<LOD	<LOD	<LOD	978.4	221.4	<LOD	<LOD	18496	653.2	951.2
City R.O.W. west of H. Kramer north of loading dock	143	30.5	6/15/2005 11:43	<LOD	32.3	165.3	45.9	884	<LOD	<LOD	<LOD	6668.8	1329.6	<LOD	<LOD	16499.2	<LOD	1009.6
at 3" - 4" horizon	144	30.6	6/15/2005 11:46	21.7	141.1	60	117.7	247	<LOD	<LOD	<LOD	1809.6	491.2	<LOD	<LOD	19392	<LOD	874.4
City R.O.W. west of Dvorak Park at 21st. St & May	145	29.5	6/15/2005 12:20	<LOD	61	100.7	70.8	269.8	<LOD	<LOD	<LOD	791.6	188.5	<LOD	<LOD	16396.8	<LOD	<LOD
at 4" horizon	146	30.1	6/15/2005 12:22	<LOD	80	86.3	71.4	364.4	<LOD	<LOD	<LOD	799.6	156.7	<LOD	<LOD	16499.2	<LOD	624.4

- Readings collected from soil surface either on bare soil or just beneath sod, unless otherwise noted.
- Horizontal grid lines on Table separate XRF screening locations.
- <LOD indicates "below level of detection".

HK 01175

APPENDIX B

PHASE 2 AND 3 FIELD PROCEDURES

1.0 INTRODUCTION

The procedures presented herein detail the sampling and analytical protocols to be utilized during the shallow subsurface soil investigative activities to be conducted at the H. Kramer & Company Facility (Site) located in Chicago, Illinois.

2.0 GENERAL PROTOCOLS

2.1 EQUIPMENT CLEANING

All investigative and sampling equipment will be decontaminated prior to field use and after each sample is collected to prevent potential cross-contamination between samples. Duplicate samples shall be collected concurrently with original samples therefore, sampling equipment will not be decontaminated before collection of the duplicate samples. Decontamination of equipment will be performed as follows:

i) wash with potable water and Alconox™ detergent using a brush, if necessary, to remove all visible foreign matter;

ii) rinse thoroughly with distilled water; and

iii) allow the equipment to air dry on a clean plastic sheet or aluminum foil as long as possible.

Following the final rinse, equipment will be visually inspected to verify that it is free of soil and other solid material that could contribute to possible cross-contamination.

2.2 FIELD SAMPLING

2.2.1 SAMPLE LABELING

Each sample will be labeled with a unique sample code that will facilitate tracking and cross-referencing of sample information. The sample identification code system is described below.

Example: GW-060193-XX-001

S	-	designates types of sample (GW-groundwater, S-soil)
063000	-	designates date of collection presented as month/day/year
XX	-	sampler's initials
001	-	sequential number starting with 01

Quality Control (QC) samples also will be numbered with a unique sample site number, consistent with the numbering system described above.

2.2.2 FIELD LOG

A summary of all activities performed at the Site will be recorded in the field log book. The field log book will be a bound document with consecutively numbered pages. The entries for each day will commence on a new page, which will be dated. Marking through the error with a single line, so as to remain legible, and initialing this action followed by the written correction will make corrections. The field log books generated will be numbered consecutively and maintained at the office of the project engineer.

The following information will be recorded in the field log book for each sample collected:

i) facility location identification;

ii) nature of activities being performed at the Site;

iii) unique sample identification number;

iv) date and time of sample collection;

v) weather conditions;

vi) designation as to the type of sample (groundwater, soil, etc.);

vii) designation as to the means of collection (grab, bailer, etc.);

viii) name of sampling technician;

ix) analyses to be performed on sample; and

x) any other relevant comments such as odor, staining, texture, filtering, preservation, etc.

For the installation of investigative borings the following will be recorded in the field log book:

i) weather conditions;

ii) date of installation;

iii) type of equipment used;

iv) length of time to complete the investigative boring;

v) depth of boring;

vi) appearance of cuttings

vii) geologic log of the borehole; and

viii) any other relevant comments.

Alternatively, the stratigraphic log for each soil boring may be recorded on the appropriate CRA field form.

2.2.3 CHAIN-OF-CUSTODY FORMS

Chain-of-custody records will be used to track all samples from time of collection to the arrival of samples at the laboratory. Each sample container being shipped to the laboratory will contain a chain-of-custody form. The chain-of-custody form consists of four copies that are distributed to the sampler, to the shipper, to the contract laboratory and to the office file of the project engineer. The sampler and shipper will maintain their copies while the other two copies are enclosed in a waterproof enclosure within the sample container. The laboratory, upon receiving the samples, will complete the remaining copies. The laboratory will maintain one copy for its records. The executed original will be returned to CRA with the data deliverables package.

2.2.4 SAMPLE CONTAINERS AND HANDLING

All samples will be placed in appropriate sample containers, labeled and properly sealed. The sample labels will include sample identification number, place of collection, date and time of collection and analyses to be performed. Samples will be cushioned within the shipping coolers by the use of bubble pack wrapping. Samples will be kept cool by the use of sealed plastic bags of ice. A trip blank will accompany each shipment of aqueous samples submitted for VOC analysis.

Samples will be shipped to the project laboratory by commercial courier or delivered by hand. For samples collected on a Sunday or holiday, additional ice will be placed in the coolers, the coolers will be sealed and stored in a secure location then picked up by the courier or hand delivered on the next business day.

A chain-of-custody seal will be placed over the lid on the front and back of each shipping cooler. The seal will secure the lid and provide evidence that the samples have not been tampered with en-route to the laboratory. Clear tape will be placed over the seals to ensure that they are not accidentally broken during shipment.

Upon receipt of the cooler by the laboratory, the designated sample custodian will inspect the cooler. The sample custodian will note the condition of the cooler and seal on the chain-of-custody form. The sample custodian will then check the contents of the

cooler against the information noted on the chain-of-custody form. If damage or discrepancies are observed, they will be duly recorded in the remark column of the chain-of-custody form, the form will then be signed and dated. Moreover, any observed damage or discrepancies will be reported immediately to the laboratory supervisor who will inform the laboratory manager and QC officer.

3.0 INVESTIGATIVE PROTOCOLS

During the soil investigation both surficial and subsurface soil samples will be collected from locations on-Site and off-Site. Details regarding the investigation are summarized in the following discussion.

3.1 ON-SITE SOIL SAMPLE COLLECTION

Approximately 48 soil samples will be collected from 16 soil borings. Soil samples will be collected through the advancement of shallow soil borings. Soil borings will be advanced using direct push (DP) technology methods. Soil boring will be advanced to a depth of approximately eight feet below ground surface or to groundwater, whichever is encountered first. The objective of the investigation is to determine both the horizontal and vertical distribution of metals within the subsurface soils within the open areas of the Site.

Soil samples will be collected using direct-push technology (DPT) such as a Geoprobe™ rig. The Geoprobe will be fitted with clean acetate liners prior to borehole advancement. Soil samples will be collected using the following procedure:

i) A new pair of disposable nitrile gloves will be used for handling each sample.

ii) Prior to use at each sampling location, all sampling equipment will be decontaminated in accordance with Section 2.1.

iii) The DPT sampler equipped with a liner will be advanced to the top of the target interval. The sampling device will then be released and the probe will be driven through the target depth.

iv) The soil sample will be retrieved by recovering the sampler from the borehole and opening the soil probe.

v) CRA's field geologist will classify the soil samples consistent with the Unified Soil Classification System.

vi) The sample(s) selected for analysis will be transferred into laboratory-supplied containers and labeled.

Representative soil samples from the 0.0 - 0.5', 2' - 3' and 5' - 6' foot intervals (approximately) will be retained for laboratory analysis. Soil samples will be analyzed for priority pollutant metals using method EPA SW-846 6000/7000.

Upon completion soil borings will be abandoned by backfilling the resulting borehole soil cuttings and capped with bentonite and then gravel.

3.2 OFF-SITE SOIL SAMPLE COLLECTION

The off-Site sampling program is being conducted to determine the area background concentration of metals within the surficial soils of the Pilsen Area of Chicago in accordance with the procedures outlines in Illinois Administrative Code (IAC) 742.405. Samples will be discrete samples and collected from the 0 to 4-inch interval. It is estimated that approximately 25 locations in the area surrounding the Site will be collected. Sampling locations will be selected in the field and consist primarily grass covered areas within the City of Chicago right-of-way and in city parks. Most of the selected sampling locations will be located a minimum of two blocks away from the H. Kramer Site and if possible an equal number of samples will be collected in each direction from the H. Kramer Site.

The following details soil sample collection procedures.

i) A new pair of disposable nitrile gloves will be used for each sample.

ii) Prior to use at each sampling location, all sampling equipment will be decontaminated in accordance with Section 2.1.

iii) A clean stainless steel utensil such as a trowel or spoon will be used to obtain and aliquot of soil from to a depth of four inches at each sample location.

iv) A representative soil sample will be placed into laboratory-supplied sample containers. The sample container will be labeled and placed in a cooler containing ice.

v) The sampling equipment will be decontaminated in accordance with Section 2.1 before reuse at another location.

Soil samples will be analyzed for priority pollutant metals using method EPA SW-846 6000/7000.

3.3 QUALITY ASSURANCE / QUALITY CONTROL SAMPLES

Quality assurance/quality control samples will consist of field equipment blank (rinsate), duplicate samples, and matrix spike / matrix spike duplicate (MS/MSD) samples. Rinsate samples shall be collected at a frequency of one per 20 investigative samples collected or at a minimum of one per sampling event. These samples consist of distilled/deionized water poured through or over the sampling equipment being used to collect the samples. This provides a quality assurance check on the decontamination procedures employed for the sampling equipment. The equipment blank samples will be analyzed for the same analytical parameters as investigative samples. The duplicate sample will consist of collecting two samples from the same interval at one of the sampling locations. Each sample will be assigned a unique sample identification number. Duplicate samples will be collected at a frequency of one per 20 investigative samples. MS/MSD samples provide information about the effect of the sample matrix on the preparation and measurement methodology. All matrix spikes are performed in duplicate. One MS/MSD sample will be selected by the laboratory for every 20 investigative samples or at a minimum of one per sampling event. No additional sample volume is required for soil MS/MSD analyses.

4.0 LABORATORY ANALYTICAL PROTOCOLS

Collected soil samples will be e analyzed for priority pollutant metals using method EPA SW-846 6000/7000. Laboratory analyses will be performed consistent with the protocols outlined in the IEPA's Analytical Quality Assurance Plan (AQAP) requirements.

Following receipt of the analytical data, a data quality assessment and validation will be completed.

APPENDIX C

SOIL BORING AND MONITORING WELL STRATIGRAPHIC LOGS

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: H. Kramer
PROJECT NUMBER: 039826
CLIENT: H. Kramer
LOCATION: Chicago, Illinois
DRILLING CONTRACTOR: Paramount

HOLE DESIGNATION: GP-1
DATE COMPLETED: July 7, 2005
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: J. Hargens

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	FILL, gravel						
	FILL, slag, cinder, brick, gravel, brown	0.5	2" Diameter Borehole				
2				1	P/S		
4	Fill, wood	4.0	Backfilled with Soil Cuttings and Bentonite Chips				
	ML-SILT, sandy, fine grained, brown	5.0					
6	- wet at 6.0ft BGS		▽	2	P/S		
8							
10	CL-CLAY, gray	10.0		3	P/S		
12	END OF BOREHOLE @ 12.0ft BGS	12.0					

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽
CHEMICAL ANALYSIS ◯

OVERBURDEN LOG 039826-BH.GPJ CRA_CORP.GDT 7/21/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: H. Kramer
PROJECT NUMBER: 039826
CLIENT: H. Kramer
LOCATION: Chicago, Illinois
DRILLING CONTRACTOR: Paramount

HOLE DESIGNATION: GP-2
DATE COMPLETED: July 7, 2005
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: J. Hargens

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	FILL, gravel						
	FILL, slag, cinder, brick, gravel, brown	0.5	2" Diameter Borehole				
2				1	P/S		
	FILL, gravel, gray	3.5					
4	FILL, wood, black	4.0	Backfilled with Soil Cuttings and Bentonite Chips				
	ML-SILT, sandy, fine grained, brown	5.0					
6	- wet at 6.0ft BGS		∇	2	P/S		
8	END OF BOREHOLE @ 8.0ft BGS	8.0					
10							
12							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇
CHEMICAL ANALYSIS ◯

OVERBURDEN LOG 039826-BH.GPJ CRA_CORP.GDT 7/21/05

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

PROJECT NAME: H. Kramer
PROJECT NUMBER: 039826
CLIENT: H. Kramer
LOCATION: Chicago, Illinois
DRILLING CONTRACTOR: Paramount

HOLE DESIGNATION: GP-3
DATE COMPLETED: July 7, 2005
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: J. Hargens

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	FILL, gravel						
	FILL, brick, gravel	0.5	2" Diameter Borehole				
2				1	P/S		
	FILL, cinders, slag, black	3.5					
4	ML-SILT, sandy, fine grained, brown	4.0	Backfilled with Soil Cuttings and Bentonite Chips				
6	- wet at 6.0ft BGS		∇	2	P/S		
8	END OF BOREHOLE @ 8.0ft BGS	8.0					
10							
12							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇
CHEMICAL ANALYSIS ◯

OVERBURDEN LOG 039826-BH.GPJ CRA_CORP.GDT 7/21/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: H. Kramer
PROJECT NUMBER: 039826
CLIENT: H. Kramer
LOCATION: Chicago, Illinois
DRILLING CONTRACTOR: Paramount

HOLE DESIGNATION: GP-4
DATE COMPLETED: July 7, 2005
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: J. Hargens

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	FILL, gravel						
	FILL, slag, brick, cinders, gravel, brown	0.5	2" Diameter Borehole				
2				1	P/S		
4			Backfilled with Soil Cuttings and Bentonite Chips				
	ML-SILT, sandy, fine grained, brown	5.0					
6	- wet at 6.0ft BGS		∇	2	P/S		
8	END OF BOREHOLE @ 8.0ft BGS	8.0					
10							
12							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇
CHEMICAL ANALYSIS ◯

OVERBURDEN LOG 26-BH.GPJ CRA_CORP.GDT 7/21/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: H. Kramer
PROJECT NUMBER: 039826
CLIENT: H. Kramer
LOCATION: Chicago, Illinois
DRILLING CONTRACTOR: Paramount

HOLE DESIGNATION: GP-5
DATE COMPLETED: July 7, 2005
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: J. Hargens

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	FILL, gravel						
	FILL, slag, cinders, brick, gravel	0.5	2" Diameter Borehole				
2				1	P/S		
	ML-SILT, sandy, fine grained, dark brown	3.5	Backfilled with Soil Cuttings and Bentonite Chips				
4							
6	- wet at 6.0ft BGS		∇	2	P/S		
8	END OF BOREHOLE @ 8.0ft BGS	8.0					
10							
12							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇
CHEMICAL ANALYSIS ◯

OVERBURDEN LOG 039826-BH.GPJ CRA_CORP.GDT 7/21/05

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

PROJECT NAME: H. Kramer
PROJECT NUMBER: 039826
CLIENT: H. Kramer
LOCATION: Chicago, Illinois
DRILLING CONTRACTOR: Paramount

HOLE DESIGNATION: GP-6
DATE COMPLETED: July 7, 2005
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: J. Hargens

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	FILL, gravel						
	FILL, slag, cinders, brick, gravel, brown	0.5	2" Diameter Borehole				
2				1	P/S		
4	FILL, wood	4.0	Backfilled with Soil Cuttings and Bentonite Chips				
	ML-SILT, sandy, fine grained, brown	4.5					
6	- wet at 6.0ft BGS		∇	2	P/S		
8	END OF BOREHOLE @ 8.0ft BGS	8.0					
10							
12							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇
CHEMICAL ANALYSIS ◯

OVERBURDEN LOG...9826-BH.GPJ CRA_CORP.GDT 7/21/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: H. Kramer
PROJECT NUMBER: 039826
CLIENT: H. Kramer
LOCATION: Chicago, Illinois
DRILLING CONTRACTOR: Paramount

HOLE DESIGNATION: GP-7
DATE COMPLETED: July 7, 2005
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: J. Hargens

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	FILL, gravel						
	FILL, brick	0.5					
	FILL, silt, clay, brown	1.0	2" Diameter Borehole				
2	FILL, slag, cinders, brick, gravel, brown	2.0		1	P/S		
4	ML-SILT, sandy, fine grained, dark gray, odor	4.0	Backfilled with Soil Cuttings and Bentonite Chips				
6	- wet at 6.0ft BGS		▽	2	P/S		
8	END OF BOREHOLE @ 8.0ft BGS	8.0					
10							
12							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽
CHEMICAL ANALYSIS ◯

OVERBURDEN LO 9826-BH.GPJ CRA_CORP.GDT 7/21/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: H. Kramer
PROJECT NUMBER: 039826
CLIENT: H. Kramer
LOCATION: Chicago, Illinois
DRILLING CONTRACTOR: Paramount

HOLE DESIGNATION: GP-8
DATE COMPLETED: July 7, 2005
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: J. Hargens

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	FILL, gravel	0.5	2" Diameter Borehole				
2	FILL, medium grained sand, some clay, dark brown			1	P/S		
	FILL, wood, dark brown	3.5					
4	ML-SILT, sandy, fine grained, dark brown, slight odor	4.0	Backfilled with Soil Cuttings and Bentonite Chips				
6	- wet at 6.0ft BGS		∇	2	P/S		
8	END OF BOREHOLE @ 8.0ft BGS	8.0					
10							
12							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇
CHEMICAL ANALYSIS ◯

OVERBURDEN L 39826-BH.GPJ CRA_CORP.GDT 7/21/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: H. Kramer
PROJECT NUMBER: 039826
CLIENT: H. Kramer
LOCATION: Chicago, Illinois
DRILLING CONTRACTOR: Paramount

HOLE DESIGNATION: GP-9
DATE COMPLETED: July 7, 2005
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: J. Hargens

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	FILL, gravel						
	FILL, brick, slag, cinders, brown	0.5	2" Diameter Borehole				
2				1	P/S		
	FILL, wood, black	3.5					
4	ML-SILT, sandy, fine grained, brown	4.0	Backfilled with Soil Cuttings and Bentonite Chips				
6	- wet at 6.0ft BGS		∇	2	P/S		
8	END OF BOREHOLE @ 8.0ft BGS	8.0					
10							
12							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇
CHEMICAL ANALYSIS ◯

OVERBURDEN LOG ..39826-BH.GPJ CRA_CORP.GDT 7/21/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: H. Kramer
PROJECT NUMBER: 039826
CLIENT: H. Kramer
LOCATION: Chicago, Illinois
DRILLING CONTRACTOR: Paramount

HOLE DESIGNATION: GP-10
DATE COMPLETED: July 7, 2005
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: J. Hargens

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	FILL, gravel	0.5	2" Diameter Borehole				
	FILL, sand, fine grained, brown	1.0					
	FILL, slag, cinders, gravel, brown			1	P/S		
2							
4			Backfilled with Soil Cuttings and Bentonite Chips				
	ML-SILT, sandy, fine grained, brown	5.0					
6	- wet at 6.0ft BGS			2	P/S		
8	END OF BOREHOLE @ 8.0ft BGS	8.0					
10							
12							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇
CHEMICAL ANALYSIS ◯

OVERBURDEN LOG 039826-BH.GPJ CRA_CORP.GDT 7/21/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: H. Kramer
PROJECT NUMBER: 039826
CLIENT: H. Kramer
LOCATION: Chicago, Illinois
DRILLING CONTRACTOR: Paramount

HOLE DESIGNATION: GP-11
DATE COMPLETED: July 7, 2005
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: J. Hargens

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	FILL, gravel	0.5	2" Diameter Borehole				
	FILL, slag, cinders	1.5					
2	FILL, sand, fine grained, black			1	P/S		
4			Backfilled with Soil Cuttings and Bentonite Chips				
	ML-SILT, sandy, fine grained, dark brown	5.0					
6	- wet at 6.0ft BGS		∇	2	P/S		
	SP-SAND, fine grained, brown, wet	7.0					
8							
10	CL-CLAY, gray	10.0		3	P/S		
12	END OF BOREHOLE @ 12.0ft BGS	12.0					

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇
CHEMICAL ANALYSIS ◯

OVERBURDEN LOG 039826-BH.GPJ CRA_CORP.GDT 7/21/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: H. Kramer
PROJECT NUMBER: 039826
CLIENT: H. Kramer
LOCATION: Chicago, Illinois
DRILLING CONTRACTOR: Paramount

HOLE DESIGNATION: GP-12
DATE COMPLETED: July 7, 2005
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: J. Hargens

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	FILL, gravel						
	FILL, slag, cinders, gravel, dark brown	0.5	2" Diameter Borehole				
2				1	P/S		
4	FILL, wood, black	4.0	Backfilled with Soil Cuttings and Bentonite Chips				
	ML-SILT, sandy, fine grained, brown	5.0					
6	- wet at 6.0ft BGS		▽	2	P/S		
8	END OF BOREHOLE @ 8.0ft BGS	8.0					
10							
12							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽
CHEMICAL ANALYSIS ◯

OVERBURDEN LOG 039826-BH.GPJ CRA_CORP.GDT 7/21/05

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

PROJECT NAME: H. Kramer
PROJECT NUMBER: 039826
CLIENT: H. Kramer
LOCATION: Chicago, Illinois
DRILLING CONTRACTOR: Paramount

HOLE DESIGNATION: GP-13
DATE COMPLETED: July 7, 2005
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: J. Hargens

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	FILL, gravel	0.5	2" Diameter Borehole				
	FILL, slag, cinders, gravel, brown	1.0					
	FILL, fine grained sand, brown						
2	FILL, silt, clay, some fine grained sand, slag, cinders, dark brown	2.0		1	P/S		
4			Backfilled with Soil Cuttings and Bentonite Chips				
6	FILL, wood, wet	6.0		2	P/S		
8	END OF BOREHOLE @ 8.0ft BGS	8.0					
10							
12							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇
CHEMICAL ANALYSIS ◯

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: H. Kramer
PROJECT NUMBER: 039826
CLIENT: H. Kramer
LOCATION: Chicago, Illinois
DRILLING CONTRACTOR: Paramount

HOLE DESIGNATION: GP-14
DATE COMPLETED: July 7, 2005
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: J. Hargens

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	FILL, gravel						
	FILL, slag, brick, cinders, gravel, brown	0.5	2" Diameter Borehole				
2				1	P/S		
4			Backfilled with Soil Cuttings and Bentonite Chips				
	ML-SILT, sandy, fine grained, brown	5.0					
6	- wet at 6.0ft BGS		▽	2	P/S		
8	END OF BOREHOLE @ 8.0ft BGS	8.0					
10							
12							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽
CHEMICAL ANALYSIS ◯

OVERBURDEN LOG -BH.GPJ CRA_CORP.GDT 7/21/05

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

PROJECT NAME: H. Kramer
PROJECT NUMBER: 039826
CLIENT: H. Kramer
LOCATION: Chicago, Illinois
DRILLING CONTRACTOR: Paramount

HOLE DESIGNATION: GP-15
DATE COMPLETED: July 7, 2005
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: J. Hargens

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	FILL, gravel						
	FILL, slag, brick, cinders, gravel, black	0.5	2" Diameter Borehole				
2				1	P/S		
	FILL, wood, dark brown	3.7	Backfilled with Soil Cuttings and Bentonite Chips				
4							
	ML-SILT, trace fine grained sand, brown	4.5					
6	- wet at 6.0ft BGS		∇	2	P/S		
8	END OF BOREHOLE @ 8.0ft BGS	8.0					
10							
12							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇
CHEMICAL ANALYSIS ◯

OVERBURDEN LOG ...39826-BH.GPJ CRA_CORP.GDT 7/21/05

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: H. Kramer
PROJECT NUMBER: 039826
CLIENT: H. Kramer
LOCATION: Chicago, Illinois
DRILLING CONTRACTOR: Paramount

HOLE DESIGNATION: GP-16
DATE COMPLETED: July 7, 2005
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: J. Hargens

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	FILL, gravel	0.5	2" Diameter Borehole				
	FILL, slag, cinders, brick, gravel, brown			1	P/S		
2							
4	FILL, wood, black	4.0	Backfilled with Soil Cuttings and Bentonite Chips				
	ML-SILT, sandy, fine grained, brown	5.0					
6	- wet at 6.0ft BGS			2	P/S		
8	END OF BOREHOLE @ 8.0ft BGS	8.0					
10							
12							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇
CHEMICAL ANALYSIS ◯

OVERBURDEN LOG 039826-BH.GPJ CRA_CORP.GDT 7/21/05

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

PROJECT NAME: H. KRAMER
PROJECT NUMBER: 39826
CLIENT: H. KRAMER
LOCATION: CHICAGO, ILLINOIS
DRILLING CONTRACTOR: RDNP

HOLE DESIGNATION: GP-18
DATE COMPLETED: January 10, 2006
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: W. POCHRON
DRILLER: DOUG

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	GRAVEL						
	FILL-clay, intermixed with brick fragments, gavel, concrete, glass	0.4					
1							
	FILL-bricks and gravel, (no recovery below 2.0 ft.)	1.3					
2			SOIL CUTTINGS AND BENTONITE CHIPS	1DP	P/S		
3							
4			2" DIAMETER BOREHOLE				
5							
6				2DP	P/S		
7	refusal at 7.0ft BGS END OF BOREHOLE @ 7.0ft BGS	7.0					
8	NOTE: ATTEMPTED 3 ADJACENT BORINGS WITH NO RECOVERY BELOW 2ft. bgs.	8.0					

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ◯

OVERBURDEN LOG 39 -00 GEOPROBES 1-10-2006.GPJ CRA_CORP.GDT 2/14/06

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: H. KRAMER
PROJECT NUMBER: 39826
CLIENT: H. KRAMER
LOCATION: CHICAGO, ILLINOIS
DRILLING CONTRACTOR: RDNP

HOLE DESIGNATION: GP-19
DATE COMPLETED: January 10, 2006
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: W. POCHRON
DRILLER: DOUG

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	GRAVEL						
	FILL-clay intermixed with brick fragments, gravely, concrete and glass	0.3					
1	- FILL bricks and gravel at 1.2ft BGS						
2			SOIL CUTTINGS AND BENTONITE CHIPS	1DP	P/S		
3							
4			2" DIAMETER BOREHOLE				
5							
6				2DP	P/S		
7	- refusal at 7.0ft BGS END OF BOREHOLE @ 7.0ft BGS	7.0					
8	NOTE: ATTEMPTED 2 ADJACENT BORINGS WITH NO RECOVERY BELOW 1.5ft. bgs.	8.0					

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE: REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ◯

OVERBURDEN LOG 398 -03 GEOPROBES 1-10-2006.GPJ CRA_CORP.GDT 2/14/06

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: H. KRAMER
PROJECT NUMBER: 39826
CLIENT: H. KRAMER
LOCATION: CHICAGO, ILLINOIS
DRILLING CONTRACTOR: RDNP

HOLE DESIGNATION: GP-20
DATE COMPLETED: January 10, 2006
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: W. POCHRON
DRILLER: DOUG

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	GRAVEL	0.3					
	FILL-clay intermixed with gravel, brick fragments, concrete and glass	1.2					
1	FILL-bricks and gravel						
2			SOIL CUTTINGS AND BENTONITE CHIPS	1DP	P/S		
3							
4			2" DIAMETER BOREHOLE				
5							
6	SP-SAND (NATIVE), fine garined, poorly graded, tan to gray, wet	6.0		2DP	P/S		
7		7.5					
	END OF BOREHOLE @ 7.5ft BGS						
8							

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ◯

STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

PROJECT NAME: H. KRAMER
PROJECT NUMBER: 39826
CLIENT: H. KRAMER
LOCATION: CHICAGO, ILLINOIS
DRILLING CONTRACTOR: RDNP

HOLE DESIGNATION: GP-21
DATE COMPLETED: January 10, 2006
DRILLING METHOD: Geoprobe
FIELD PERSONNEL: W. POCHRON
DRILLER: DOUG

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	DEPTH ft BGS	BOREHOLE	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	GRAVEL	0.3					
	FILL-clay intermixed with brick fragments, gravel, concrete and glass						
1	- brick fragments and concrete at 1.3ft BGS						
2			SOIL CUTTINGS AND BENTONITE CHIPS	1DP	P/S		
3							
4			2" DIAMETER BOREHOLE				
5							
6				2DP	P/S		
7	END OF BOREHOLE @ 7.0ft BGS	7.0					
8	NOTE: ATTEMPTED 1 ADJACENT BORINGS WITH NO RECOVERY BELOW 2ft. bgs.	8.0					

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE

CHEMICAL ANALYSIS ◯

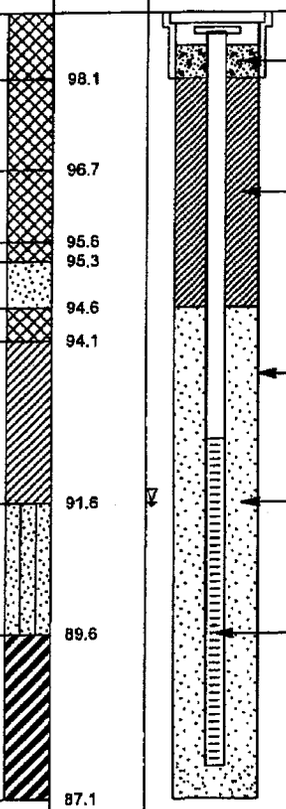
0 GEOPROBES 1-10-2006.GPJ CRA_CORP.GDT 2/14/06
OVERBURDEN LOG

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: H. Kramer
PROJECT NUMBER: 039826
CLIENT: H. Kramer
LOCATION: Chicago, Illinois
DRILLING CONTRACTOR: Paramount

HOLE DESIGNATION: MW-1
DATE COMPLETED: May 21, 2007
DRILLING METHOD: DPT/4¼" HSA
FIELD PERSONNEL: S. Punch

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL
	GROUND SURFACE TOP OF RISER	99.1 98.7
	FILL, gravel	98.1
2	FILL, sandy silt, some gravel, trace clay, dark brown/black, slightly moist	96.7
	FILL, wood chips	95.6
	FILL, brick fragments	95.3
4	SP SAND, trace fine gravel, medium to coarse grained, gray, slightly moist	94.6
	- black, moist at 4.0ft BGS	94.1
	FILL, gravel	
6	CL CLAY, silty, some fine sand, medium plasticity, brown/gray, moist	91.6
8	SM SAND, with silt, fine grained, brown/gray, saturated	89.6
10	CH CLAY, with silt, stiff, high plasticity, brown/gray, moist	87.1
12	END OF BOREHOLE @ 12.0ft BGS Soil samples collected with Geoprobe; well installed with HSA.	
14		
16		
18		



WELL DETAILS
Screened interval:
92.6 to 87.6ft AMSL
6.5 to 11.5ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 0.010 inch
Material: PVC
Seal:
97.9 to 94.6ft AMSL
1.2 to 4.5ft BGS
Material: Bentonite
Sand Pack:
94.6 to 87.1ft AMSL
4.5 to 12.0ft BGS
Material: #5 Sand

SAMPLE NUMBER	INTERVAL	REC (ft)	'N' VALUE
1	P/S	2.0	
2	P/S	3.0	
3	P/S	4.0	

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇ 5/21/07
CHEMICAL ANALYSIS ◯

OVERBURDEN LOG 039826-BH.GPJ CRA_CORP.GDT 7/13/07

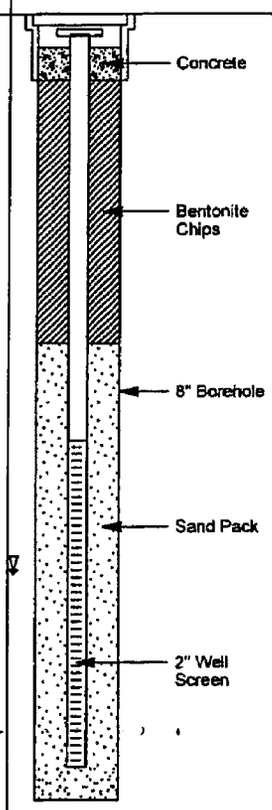
STRATIGRAPHIC AND INSTRUMENTATION LOG
(OVERBURDEN)

PROJECT NAME: H. Kramer
PROJECT NUMBER: 039826
CLIENT: H. Kramer
LOCATION: Chicago, Illinois
DRILLING CONTRACTOR: Paramount

HOLE DESIGNATION: MW-2
DATE COMPLETED: May 7, 2007
DRILLING METHOD: DPT/4¼" HSA
FIELD PERSONNEL: S. Punch

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL
	GROUND SURFACE	101.6
	TOP OF RISER	101.0
	FILL, sandy silt, trace clay, trace gravel, glass, plastic, dark brown/black, moist	
		100.1
2	FILL, brick fragments	
		98.1
	FILL, gravel	97.6
4	ML SILT, some fine sand, firm, slight plasticity, black	
6		
8	- gray/brown, saturated at 8.5ft BGS	
		92.1
10	SP SAND, some silt, fine grained, loose, gray/brown, saturated	
		90.6
	CL CLAY, silty, some coarse sand, firm, medium plasticity, gray/brown, moist	
12		89.6
	END OF BOREHOLE @ 12.0ft BGS	
	Soil samples collected with Geoprobe; well installed with HSA.	
14		
16		
18		

MONITOR WELL



WELL DETAILS
Screened interval:
95.1 to 90.1ft AMSL
6.5 to 11.5ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 0.010 inch
Material: PVC
Seal:
100.4 to 96.6ft AMSL
1.2 to 5.0ft BGS
Material: Bentonite
Sand Pack:
96.6 to 89.6ft AMSL
5.0 to 12.0ft BGS
Material: #5 Sand

SAMPLE NUMBER	INTERVAL	REC (ft)	'N' VALUE
1	P/S	2.8	
2	P/S	0.7	
3	P/S	3.5	

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽ 5/7/07
CHEMICAL ANALYSIS ◯

OVERBURDEN LOG 039826-BH.GPJ CRA_CORP.GDT 7/13/07

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: H. Kramer
PROJECT NUMBER: 039826
CLIENT: H. Kramer
LOCATION: Chicago, Illinois
DRILLING CONTRACTOR: Paramount

HOLE DESIGNATION: MW-3
DATE COMPLETED: May 21, 2007
DRILLING METHOD: DPT/4¼" HSA
FIELD PERSONNEL: S. Punch

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	MONITOR WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	GROUND SURFACE TOP OF RISER	100.2 99.9					
	FILL, gravel						
	FILL, brick fragments, cinders, gravel, sand,clay, decaying wood chips	99.7	Concrete				
2			Bentonite Chips	1	P/S	3.0	
4							
	ML SILT, with fine sand, firm, dark gray/black, moist	94.7	8" Borehole	2	P/S	3.5	
6	- tan/gray, saturated at 7.0ft BGS						
8			Sand Pack				
10	SM SAND, silty, loose, fine grained, gray, wet	90.2	2" Well Screen	3	P/S	2.5	
12	END OF BOREHOLE @ 12.0ft BGS Soil samples collected with Geoprobe; well installed with HSA.	88.2					
14							
16							
18							

WELL DETAILS
Screened interval:
93.7 to 88.7ft AMSL
6.5 to 11.5ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 0.010 inch
Material: PVC
Seal:
99.0 to 95.7ft AMSL
1.2 to 4.5ft BGS
Material: Bentonite
Sand Pack:
95.7 to 88.2ft AMSL
4.5 to 12.0ft BGS
Material: #5 Sand

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇ 5/21/07
CHEMICAL ANALYSIS ◯

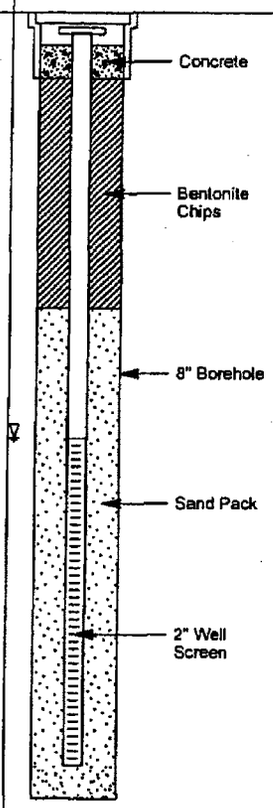
OVERBURDEN LOG 039826-BH.GPJ CRA_CORP.GDT 7/13/07

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: H. Kramer
PROJECT NUMBER: 039826
CLIENT: H. Kramer
LOCATION: Chicago, Illinois
DRILLING CONTRACTOR: Paramount

HOLE DESIGNATION: MW-4
DATE COMPLETED: May 21, 2007
DRILLING METHOD: DPT/4¼" HSA
FIELD PERSONNEL: S. Punch

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	MONITOR WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	GROUND SURFACE TOP OF RISER	98.7 98.4					
	FILL, gravel	98.2					
	FILL, medium grained sand, with clay, dark brown						
2				1	P/S	2.0	
	FILL, wood chips, dark brown	95.5					
4	ML SILT, with fine sand, dark brown/black, moist	94.7					
6	- saturated at 6.5ft BGS			2	P/S	3.0	
8							
10	SM SAND, silty, loose, fine grained, gray, wet	88.7		3	P/S	3.0	
12	END OF BOREHOLE @ 12.0ft BGS	86.7					
	Soil samples collected with Geoprobe; well installed with HSA.						
14							
16							
18							



WELL DETAILS
Screened interval:
92.2 to 87.2ft AMSL
6.5 to 11.5ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 0.010 inch
Material: PVC
Seal:
97.5 to 94.2ft AMSL
1.2 to 4.5ft BGS
Material: Bentonite
Sand Pack:
94.2 to 86.7ft AMSL
4.5 to 12.0ft BGS
Material: #5 Sand

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ∇ 5/21/07

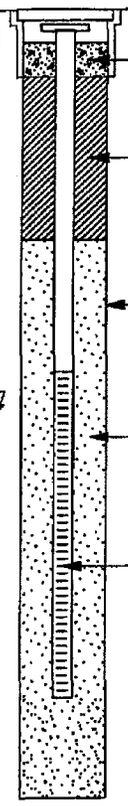
OVERBURDEN LOG 039826-BH.GPJ CRA_CORP.GDT 7/13/07

STRATIGRAPHIC AND INSTRUMENTATION LOG (OVERBURDEN)

PROJECT NAME: H. Kramer
PROJECT NUMBER: 039826
CLIENT: H. Kramer
LOCATION: Chicago, Illinois
DRILLING CONTRACTOR: Paramount

HOLE DESIGNATION: MW-5
DATE COMPLETED: May 7, 2007
DRILLING METHOD: DPT/4¼" HSA
FIELD PERSONNEL: S. Punch

DEPTH ft BGS	STRATIGRAPHIC DESCRIPTION & REMARKS	ELEV. ft AMSL	MONITOR WELL	SAMPLE NUMBER	SAMPLE INTERVAL	SAMPLE REC (ft)	SAMPLE 'N' VALUE
	GROUND SURFACE TOP OF RISER	98.9 98.6					
	FILL, bricks (old 21st Avenue)	97.9	Concrete				
2	FILL, slag, bricks, cinders, gravel, dark brown/black		Bentonite Chips	1	P/S	1.0	
4	ML SILT, with fine sand, compact, brown/gray, moist	94.9	8" Borehole				
6	- saturated at 6.0ft BGS		Sand Pack	2	P/S	2.5	
8	SP SAND, with silt, fine to medium grained, well sorted, brown/gray, saturated	90.9	2" Well Screen				
10	CL CLAY, silty, trace fine to coarse sand, stiff, medium plasticity, brown/gray, slightly moist	88.9		3	P/S	4.0	
12	END OF BOREHOLE @ 12.0ft BGS Soil samples collected with Geoprobe; well installed with HSA.	86.9					
14							
16							
18							



WELL DETAILS
Screened interval:
93.4 to 88.4ft AMSL
5.5 to 10.5ft BGS
Length: 5ft
Diameter: 2in
Slot Size: 0.010 inch
Material: PVC
Seal:
97.7 to 95.4ft AMSL
1.2 to 3.5ft BGS
Material: Bentonite
Sand Pack:
95.4 to 86.9ft AMSL
3.5 to 12.0ft BGS
Material: #5 Sand

NOTES: MEASURING POINT ELEVATIONS MAY CHANGE; REFER TO CURRENT ELEVATION TABLE
WATER FOUND ▽ 5/7/07
CHEMICAL ANALYSIS ◯

OVERBURDEN LOG 039826-BH.GPJ CRA_CORP.GDT 7/13/07

APPENDIX D

PHASE 4 FIELD PROCEDURES

ATTACHEMENT A

FIELD INVESTIGATION METHODS

The procedures presented herein detail the sampling and analytical protocols to be utilized during the Groundwater Investigation activities at the H. Kramer & Co property ("Site") located in Chicago, Illinois.

A.1 UTILITY AND SUBCONTRACTOR CLEARANCE METHODS

Prior to completing any subsurface activities, the proposed boring locations will be marked or staked and compared to overhead and subsurface utilities in the area. A utility clearance with the local one-call-service will be arranged by the drilling subcontractor.

All borings to be installed during the investigation will be listed on CRA's Quality System Form QSF-019 (Property Access/Utility Clearance Data Sheet). The form will be completed by the CRA representative and reviewed and signed by appropriate Site personnel after reviewing each boring location.

A.2 SOIL BORING INSTALLATION METHODS

Soil borings completed in unconsolidated materials will be installed using hollow stem augers (HSA). Soil borings will be advanced using a rotary drill rig equipped with HSA. Continuous split spoon samples will be collected to a depth of approximately 12-feet below ground surface in advance of the HSA in accordance with ASTM-D-1586-84. Soil samples collected will be described and classified according to the Unified Soil Classification System (USCS) by a qualified CRA geologist.

Any soil boring not completed as a monitoring well will be abandoned using 3/8-inch bentonite chips or a bentonite slurry depending on the depth and type of formation encountered (and in accordance with applicable State regulations). Drill cuttings will be containerized in 55-gallon steel drums and staged on Site.

A.3 MONITORING WELL INSTALLATION METHODS

Specific installation protocols for the shallow monitoring wells are described below:

i) the borehole will be advanced to the target depth using 4.25-inch inside diameter hollow-stem augers;

ii) a nominal 2-inch diameter (No. 10 slot) PVC screen, five feet in length, attached to a sufficient length of 2-inch diameter schedule 40 PVC riser pipe to extend to the surface, will be placed into the borehole through the augers;

iii) a filter sand pack consisting of silica sand will be installed to a minimum height of two feet above the top of the screen as the augers are removed;

iv) a minimum two foot thick seal consisting of 3/8-inch diameter bentonite pellets or chips will be placed on top of the sand pack and hydrated using potable water;

v) the remaining borehole annulus will be sealed to within three feet of the surface using pure bentonite chips.

vi) the remaining portion of the annulus will be filled with concrete and a six inch diameter protective above-grade casing or flush-mount roadway box (depending on location-specific Site conditions) will be installed over the well. The well head will be fitted with a water-tight, lockable cap.

vii) cement filled ballard posts will be installed around selected monitoring well locations.

A.4 MONITORING WELL DEVELOPMENT

In order to establish good hydraulic communication with the aquifer and significantly reduce the volume of sediment in the monitoring well, monitoring well development will be conducted in accordance with the procedure outlined below:

i) Monitoring wells will be surged using a pre-cleaned surge block for a period of at least 15- minutes.

ii) Water will be purged from the monitoring well using a pre-cleaned electronic or pneumatic submersible pump, or peristaltic pump.

iii) Groundwater will be collected at regular intervals and the pH, temperature, and conductivity will be measured using field instruments. These instruments will be calibrated daily according to the manufacturer's specifications. Additionally, observations such as color, odor, and turbidity of the purged water will be recorded.

iv) Development will continue until the turbidity and silt content of the monitoring wells are significantly reduced and three consistent readings of pH, temperature, and

conductivity are recorded, or a minimum of ten well volumes are purged as calculated below for two-inch diameter wells:

$$V_p = 10(0.16H)$$

where: V_p = purge volume
H = height of the water column in the well
$0.16H$ = one well volume

Three consistent readings for pH, temperature, and conductivity are defined as three consecutive readings within five percent of the average of the three. Turbidity measurements will also be measured and recorded on the extracted water during well development.

In the event that a monitoring well is purged dry prior to the removal of three well volumes, development will consist of purging the well dry on three consecutive days, or more frequent schedule. Water generated during well development will be containerized and stored on- Site pending disposal.

A.5 GROUNDWATER SAMPLE COLLECTION METHODS

Groundwater samples will be collected using a peristaltic pump, bladder pump, or 2-inch, variable speed electric submersible pump. Groundwater samples will be collected using low-flow/low turbidity sampling methods in accordance with the protocols specified below:

i) A new pair of disposable nitrile gloves will be used for each sample.

ii) The depth to water in each well will be measured to the nearest 0.01 foot using an electronic water level meter. The measuring device will be decontaminated prior to use.

iii) Prior to sampling, each well will be purged using a peristaltic pump, bladder pump, or 2-inch, variable speed electric submersible pump. Purge rates will be kept below 0.5 liters per minute to ensure turbidity is minimized.

iv) Dedicated tubing will be used at each monitoring well.

v) Field measurements of pH, conductivity, turbidity, and temperature of the water will be obtained during the purging of each well. Field instruments will be calibrated in accordance with manufacturer's specifications. Drawdown will be monitored at regular intervals. Purging will be considered complete when three consecutive readings are within ±0.5 standard units for pH, within ±0.5° (Fahrenheit or Celsius) for temperature,

within ±10 percent for conductivity, and ±10 percent or two consecutive NTU values below 10.

vi) After purging the required volume, groundwater samples will be collected. Containers will be filled using techniques that minimize sample agitation. Groundwater samples will be collected from the equipment used to purge the monitoring well as described above.

vii) Samples will be labeled with a unique sample identification number and placed into a cooler with ice, pending delivery to the project laboratory.

In the event the drawdown in the monitoring well can not be minimized due to poor groundwater recharge, the monitoring well will be purged dry and allowed to adequately recharge to ensure a low turbidity sample can be collected. Sample decanting may be utilized if a low turbidity sample cannot be obtains. The decanting method would consist of collecting the sample initially in a 1-liter un-preserved laboratory supplied bottle. The sample would be placed in a cooler on ice for a period of up to 2-hours to allow the suspended sediments to settle. The clear water on the top of the bottle would then be carefully decanted into a preserved laboratory sample container and then shipped to the laboratory for analysis.

A.6 GROUNDWATER SAMPLE ANALYSIS METHODS

Groundwater samples collected will be analyzed for total lead according to USEPA Method 6010 B. Collected samples will be placed into a shipping cooled on ice. The collected samples will be shipped under chain of custody protocols to Severn Trent Laboratories of North Canton Ohio for analysis.

A.7 AQUIFER CHARACTERIZATION METHODS

During the investigation, single well hydraulic response tests may be performed on monitoring wells. Response testing would be conducted to determine the hydraulic conductivity of the water bearing materials. Response testing will be performed using rising head methods as outlined below:

i) The static water level in the well will be measured using an electronic water level indicator.

ii) A ten or 15 pound per square inch (PSI) pressure transducer attached to an electronic data logger will be lowered into the well.

iii) A pre-cleaned bailer or a peristaltic pump will be used to lower the hydraulic head in the well.

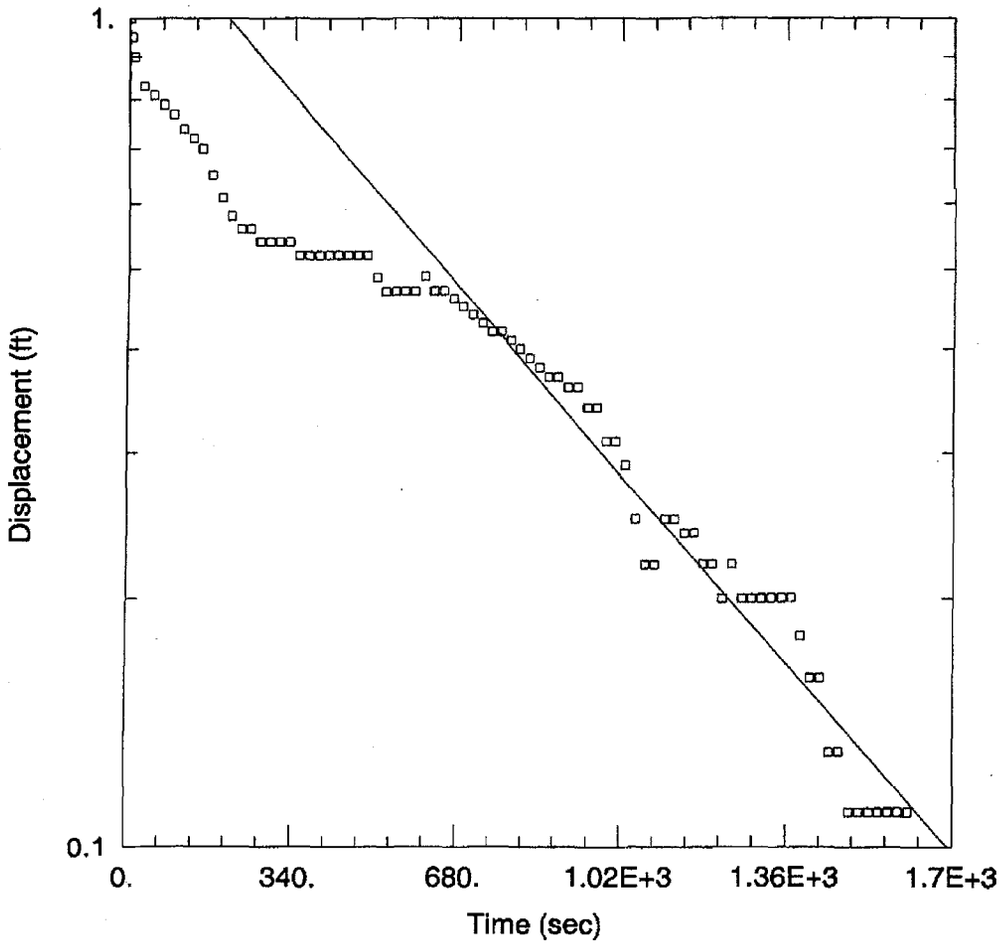
iv) Water level recovery in the well will be monitored and recorded by the data logger.

Water level recovery data recorded by the data logger will be evaluated using the methods developed by Bouwer and Rice[1] or other appropriate methods.

[1]Bouwer, H. and Rice, R.C. 1976. "A Slug Test for Determining Hydraulic Conductivity of Unconfined Aquifers with Completely or Partially Penetrating Wells", Water Resources Research, 12 (1977), pp. 423-428.

APPENDIX E

RESPONSE TEST DATA



MW-1

Data Set: U:\39826-AQT\mw1GRAPH.aqt
Date: 07/13/07 Time: 13:30:59

PROJECT INFORMATION

Company: CRA
Client: H. KRAMER AND COMPANY
Project: 039826
Location: CHICAGO, ILLINOIS
Test Well: MW-1
Test Date: 6/29/07

AQUIFER DATA

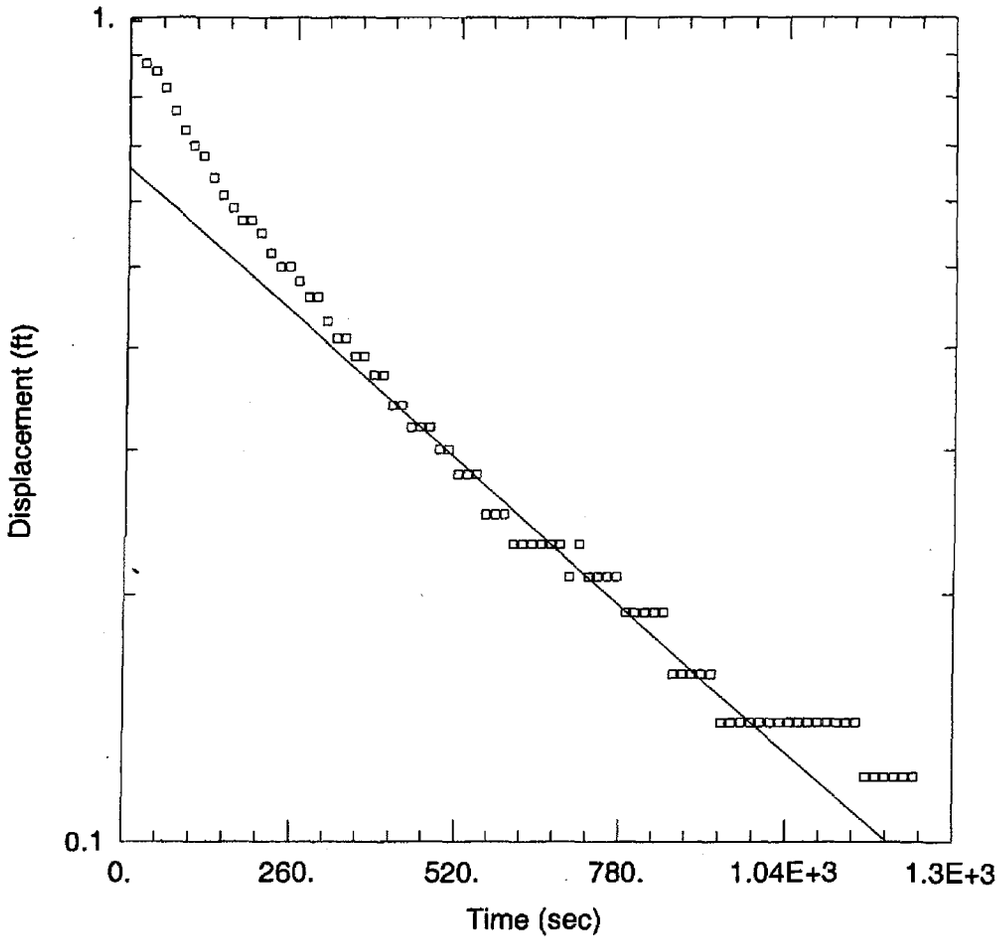
Saturated Thickness: 6.05 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-1)

Initial Displacement: 1. ft
Total Well Penetration Depth: 6.05 ft
Casing Radius: 0.08 ft
Static Water Column Height: 1.04 ft
Screen Length: 5. ft
Wellbore Radius: 0.08 ft
Gravel Pack Porosity: 0.4

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 9.942E-5 cm/sec
y0 = 1.365 ft



MW-2

Data Set: U:\39826-AQT\mw2GRAPH.aqt
Date: 07/13/07 Time: 10:26:34

PROJECT INFORMATION

Company: CRA
Client: H. KRAMER AND COMPANY
Project: 039826
Location: CHICAGO, ILLINOIS
Test Well: MW-2
Test Date: 6/29/07

AQUIFER DATA

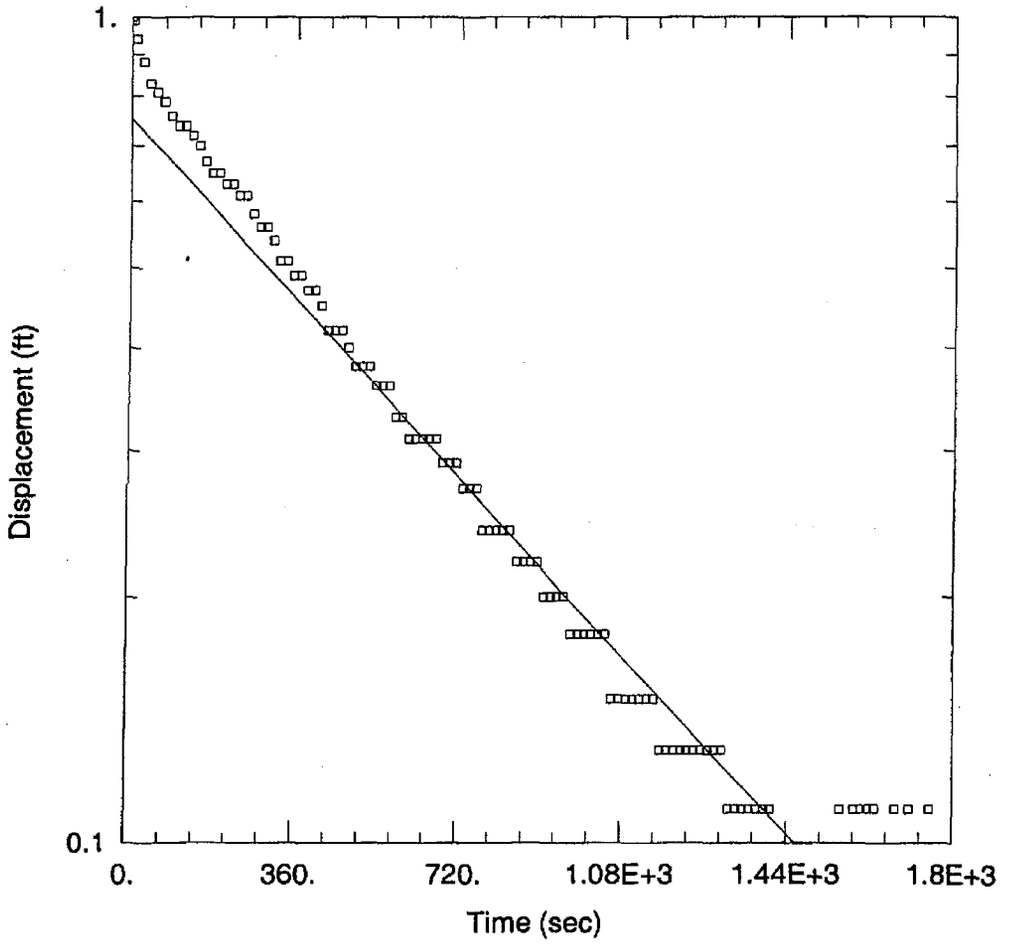
Saturated Thickness: 5.42 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-2)

Initial Displacement: 1. ft
Total Well Penetration Depth: 5.42 ft
Casing Radius: 0.08 ft
Static Water Column Height: 5.42 ft
Screen Length: 5. ft
Wellbore Radius: 0.08 ft
Gravel Pack Porosity: 0.4

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 9.893E-5 cm/sec
y0 = 0.6594 ft



MW-3

Data Set: U:\39826-AQT\mw3GRAPH.aqt
Date: 07/13/07 Time: 09:58:43

PROJECT INFORMATION

Company: CRA
Client: H. KRAMER AND COMPANY
Project: 039826
Location: CHICAGO, ILLINOIS
Test Well: MW-3
Test Date: 6/29/07

AQUIFER DATA

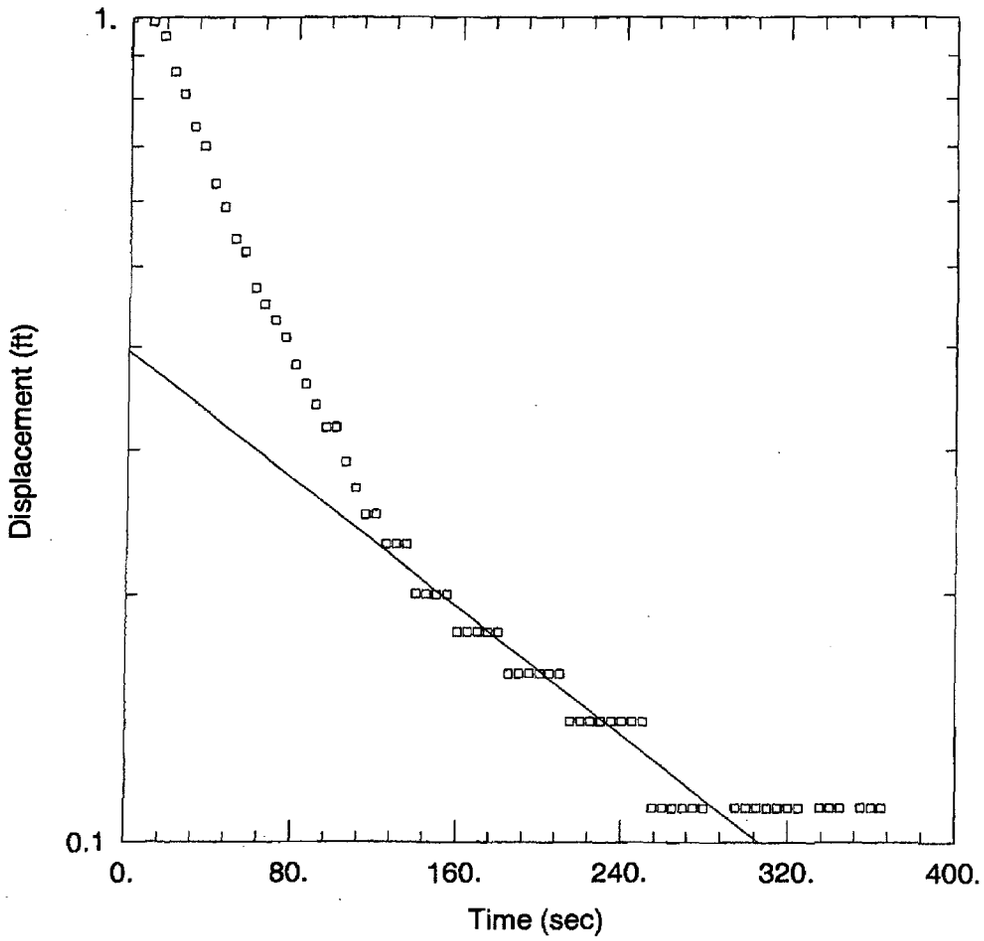
Saturated Thickness: 6.22 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-3)

Initial Displacement: 1. ft
Total Well Penetration Depth: 6.22 ft
Casing Radius: 0.08 ft
Static Water Column Height: 6.22 ft
Screen Length: 5. ft
Wellbore Radius: 0.08 ft
Gravel Pack Porosity: 0.4

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 8.949E-5 cm/sec
y0 = 0.7547 ft



MW-4

Data Set: U:\39826-AQT\mw4GRAPH.aqt
Date: 07/13/07 Time: 11:17:45

PROJECT INFORMATION

Company: CRA
Client: H. KRAMER AND COMPANY
Project: 039826
Location: CHICAGO, ILLINOIS
Test Well: MW-4
Test Date: 6/29/07

AQUIFER DATA

Saturated Thickness: 8.5 ft
Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (MW-4)

Initial Displacement: 1. ft
Total Well Penetration Depth: 8.5 ft
Casing Radius: 0.08 ft
Static Water Column Height: 1.02 ft
Screen Length: 5. ft
Wellbore Radius: 0.08 ft
Gravel Pack Porosity: 0.4

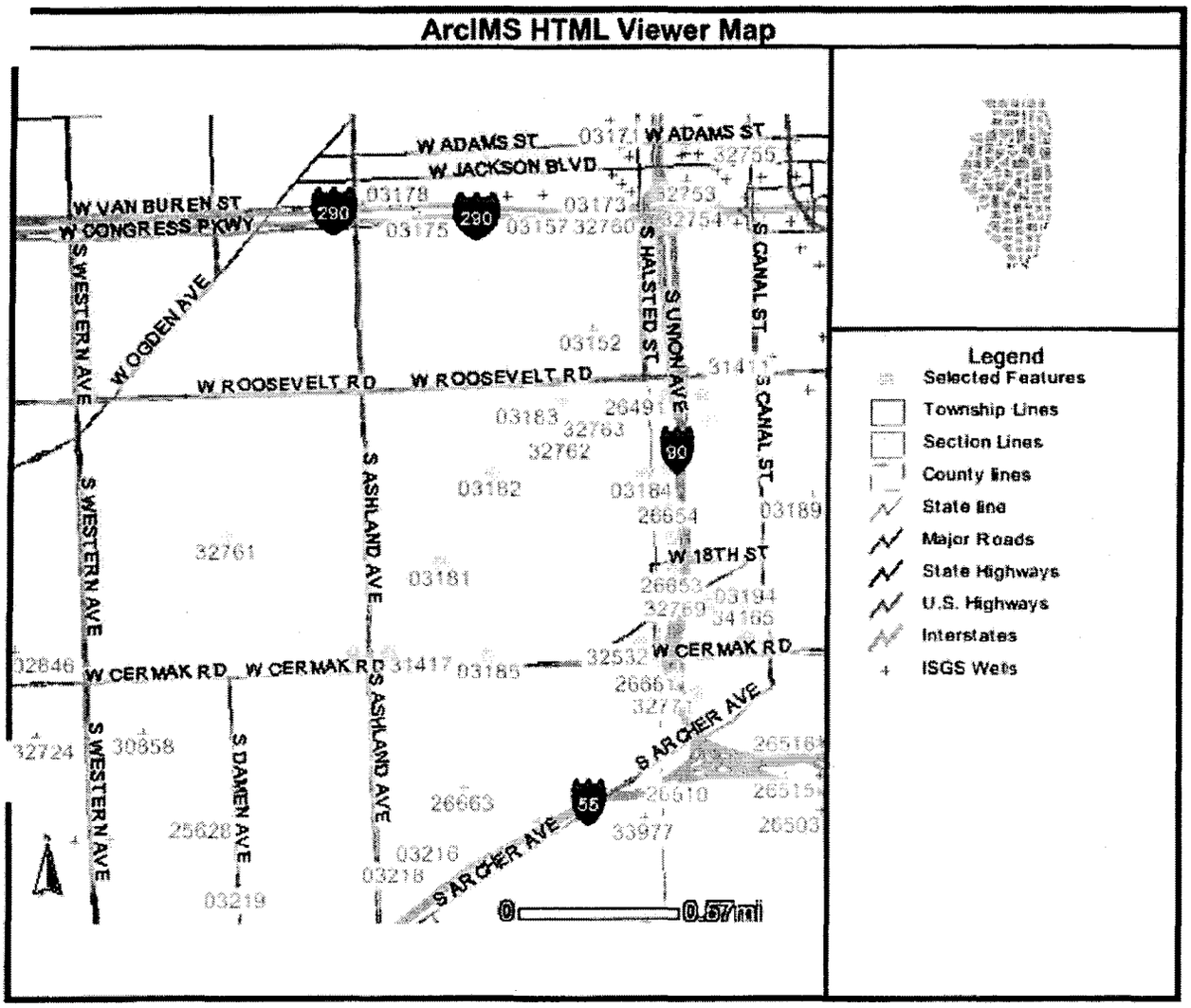
SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.0003072 cm/sec
y0 = 0.3956 ft

APPENDIX F

WATER WELL SURVEY DATA

Information and data presented were obtained from various Federal, State, and local agencies and are subject to revision.



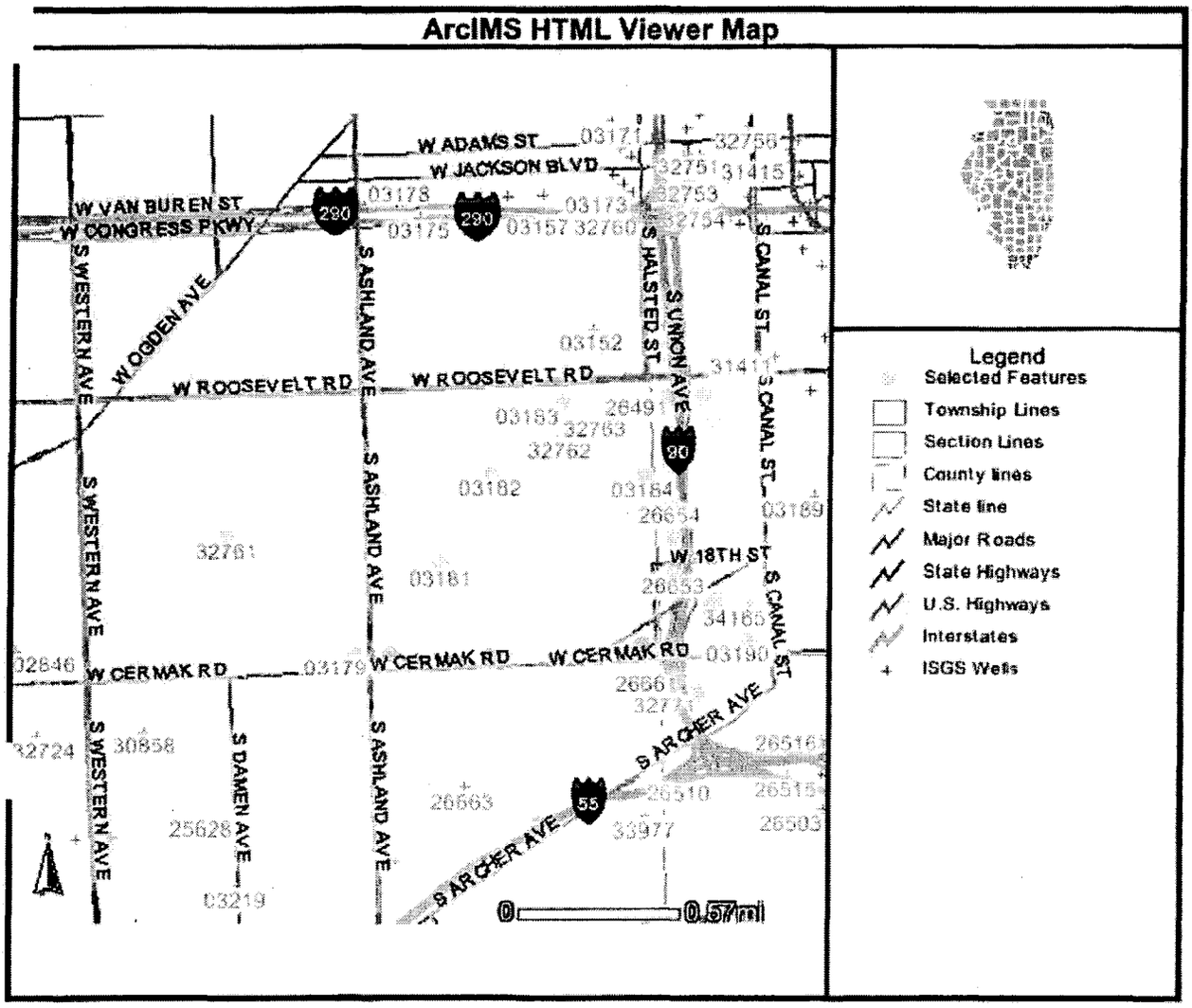
ISGS Wells

Rec	API_NUMBER	TOTAL_DEPT	FARM_NAME	ELEVATION	STATUS	LAM_X	LAM_Y	LATITUDE	LONGITUDE	COUNTY_NO
1	120310319000	65	Chgo Pub Wks Dept	585	ENG	3504526	3215743	41.853538	87.640079	03190
2	120310319200	53	Subway Boring	592	ENG	3503852	3219822	41.864816	87.642255	03192
3	120310319400	1620	Western Shade Cloth	590	WATER	3503921	3216491	41.855633	87.642252	03194
4	120310319500	1603	Western Shade Cloth	591	WATER	3503851	3216388	41.855353	87.642518	03195
5	120312649000	93	Dan Ryan Exprsway	594	ENG	3503663	3220307	41.866163	87.642916	26490
6	120312649100	66	Dan Ryan Exprsway	595	ENG	3503000	3220277	41.866117	87.645362	26491
7	120310317900	43	Blue Island Tunnel	591	ENG	3497214	3215459	41.853165	87.667048	03179
8	120310318100	55	Blue Island Tunnel	592	ENG	3498820	3217153	41.857743	87.661003	03181
9	120310318200	56	Blue Island Tunnel	594	ENG	3499753	3218827	41.862304	87.657439	03182
10	120310318300	65	Blue Island Tunnel	593	ENG	3501020	3220190	41.865989	87.652667	03183
11	120310318400	48	Subway Boring	591	ENG	3502573	3218783	41.862025	87.647048	03184

12	120310318500	43	Subway Boring	589	ENG	3499717	3215393	41.852844	87.657828	03185
13	120312664800	60	Dan Ryan Exprsway	592	ENG	3503030	3219622	41.864311	87.645300	26648
14	120312665100	62	Dan Ryan Exprsway	591	ENG	3503121	3217657	41.858891	87.645113	26651
15	120312665200	63	Dan Ryan Exprsway	590	ENG	3503121	3217657	41.858891	87.645113	26652
16	120312665300	70	Dan Ryan Exprsway	591	ENG	3503152	3217002	41.857085	87.645048	26653
17	120312665400	58	Dan Ryan Exprsway	590	ENG	3503091	3218312	41.860698	87.645174	26654
18	120312665500	65	Dan Ryan Exprsway	593	ENG	3503060	3218967	41.862504	87.645239	26655
19	120312666100	60	Dan Ryan Exprsway	590	ENG	3503235	3215035	41.851660	87.644890	26661
20	120313141600	17	Coca-Cola Bottling Co.	595	MONIT	3497878	3215483	41.853194	87.664599	31416
21	120313141700	17	Coca-Cola Bottling Co.	0	MONIT	3497878	3215483	41.853194	87.664599	31417
22	120313253200	1005	Concrete Prod. Services	590	WATER	3502550	3215666	41.853437	87.647367	32532
23	120313276600	61	Joanna Western Mills Plant	0	ENG	3503840	3216373	41.855313	87.642560	32766
24	120313276700	61	Joanna Western Mills Plant	0	ENG	3503840	3216373	41.855313	87.642560	32767
25	120313276800	51	Joanna Western Mills Plant	0	ENG	3503840	3216373	41.855313	87.642560	32768

More Records

Information and data presented were obtained from various Federal, State, and local agencies and are subject to revision.



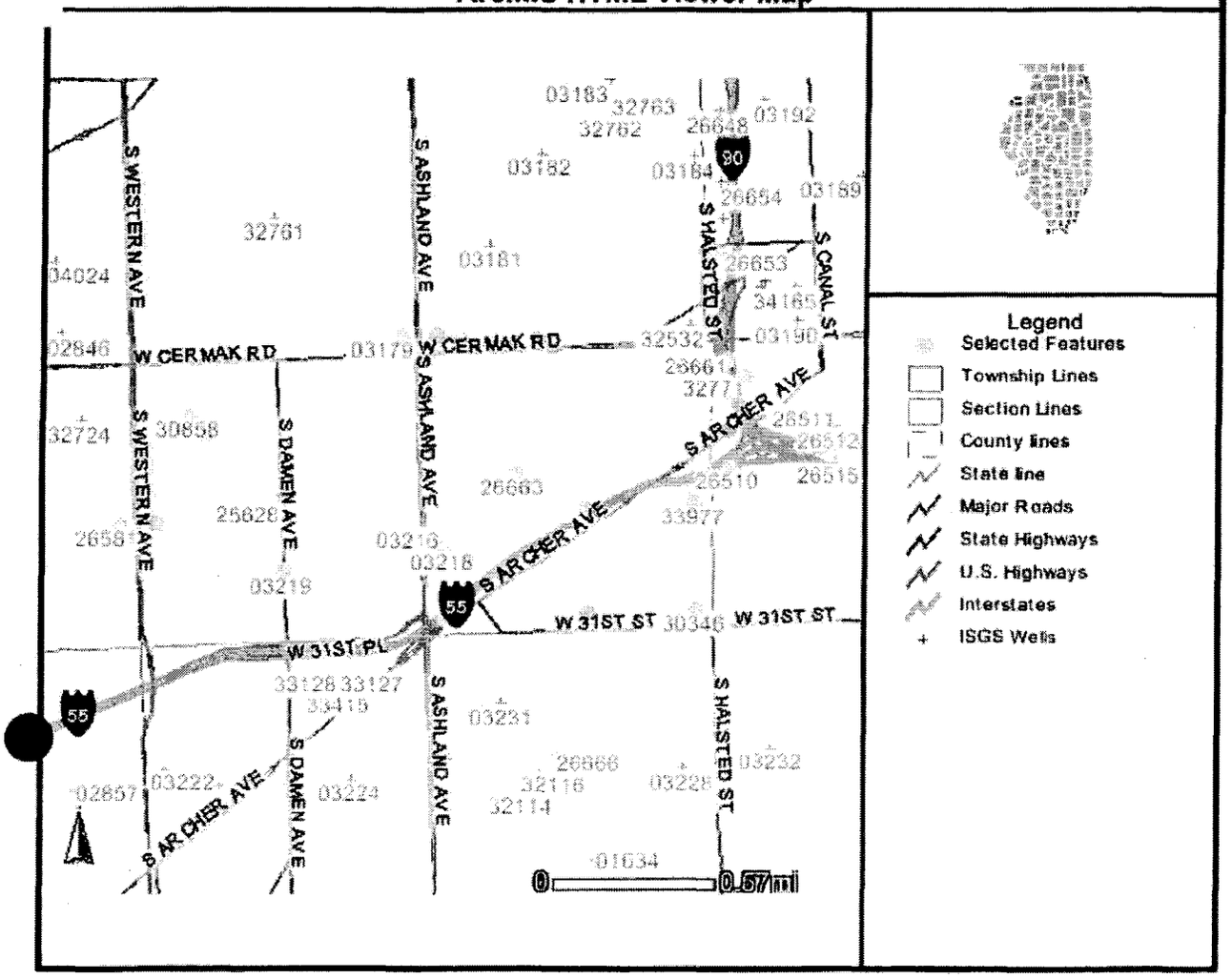
ISGS Wells

Rec	API_NUMBER	TOTAL_DEPT	FARM_NAME	ELEVATION	STATUS	LAM_X	LAM_Y	LATITUDE	LONGITUDE	COUNTY_N
26	120313277100	52	Dan Ryan Express over Chi. Sanitary	0	ENG	3503571	3214718	41.850768	87.643676	32771
27	120313276100	240	Chicago Union Lime Works	0	MINER	3494804	3217652	41.859342	87.675768	32761
28	120313276300	20	Prop. Blue Island Ave	0	ENG	3501048	3219537	41.864188	87.652613	32763
29	120313276400	80	Joanna Western Mills Plant	0	ENG	3503840	3216373	41.855313	87.642560	32764
30	120313276500	56	Joanna Western Mills Plant	0	ENG	3503840	3216373	41.855313	87.642560	32765
31	120313276200	70	Prop Blue Island Ave	0	ENG	3501048	3219537	41.864188	87.652613	32762
32	120313276900	51	Joanna Western Mills Plant	0	ENG	3503840	3216373	41.855313	87.642560	32769
33	120313416500	895	North Side Rock Tunnel	584	STRAT	3504497	3216399	41.855347	87.640136	34165

revious 25 Records

Information and data presented were obtained from various Federal, State, and local agencies and are subject to revision.

ArcIMS HTML Viewer Map



ISGS Wells

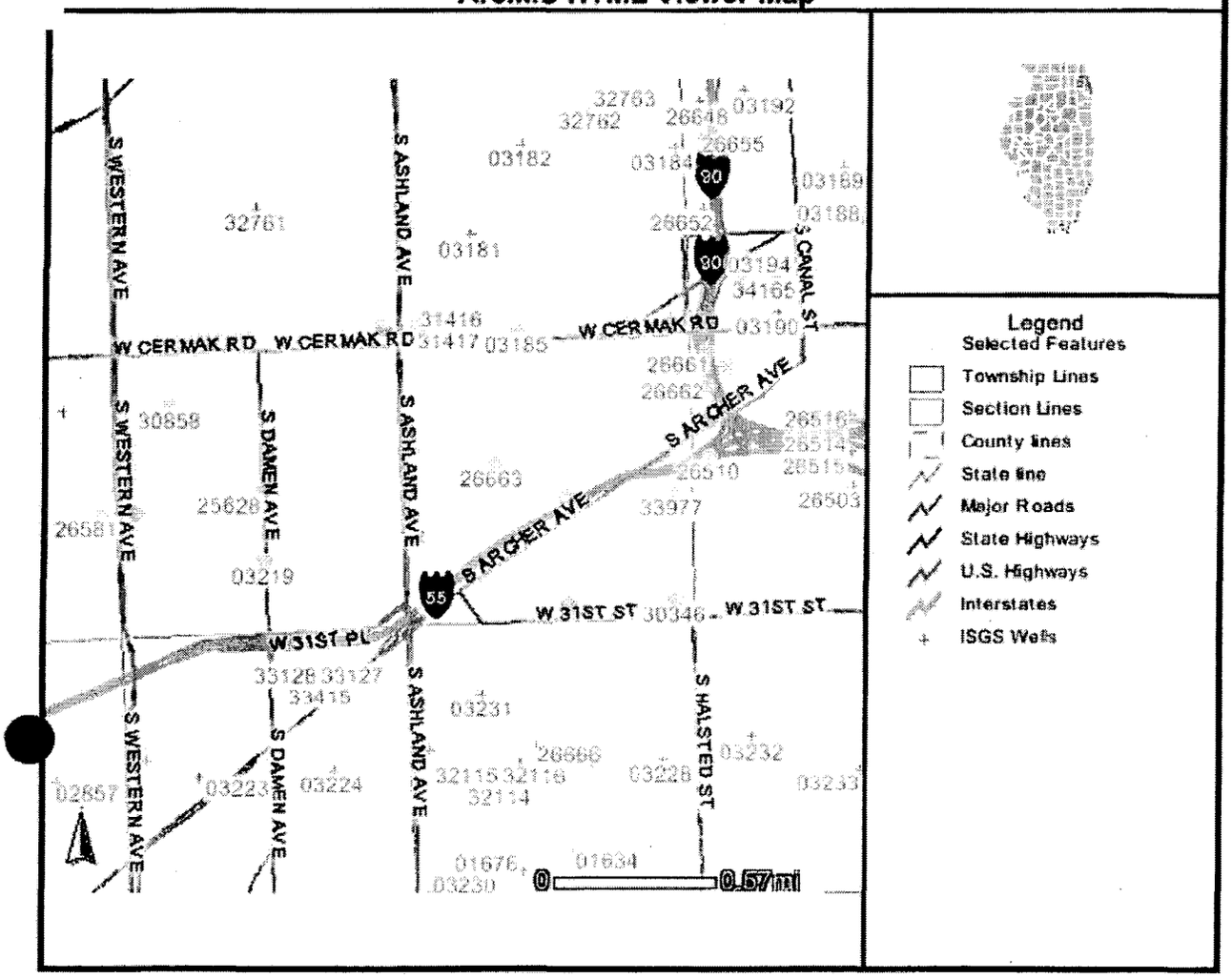
Rec	API_NUMBER	TOTAL_DEPT	FARM_NAME	ELEVATION	STATUS	LAM_X	LAM_Y	LATITUDE	LONGITUDE	COUNTY_N
1	120310149900	2188	Citizens Brewing	600	WATER	3500644	3212300	41.844269	87.654643	01499
2	120310321600	54	Chgo Pub Works Dept	592	ENG	3498012	3211545	41.842335	87.664398	03216
3	120310321700	56	Chgo Pub Works Dept	592	ENG	3498056	3210232	41.838715	87.664334	03217
4	120310321800	54	Chgo Pub Works Dept	592	ENG	3498012	3211545	41.842335	87.664398	03218
5	120310321900	49	Chg Pub Works Dept	587	ENG	3495041	3211097	41.841266	87.675379	03219
6	120312658100	43	26Th & Wstrn Up	599	ENG	3492025	3211956	41.843799	87.686430	26581
7	120312666300	89	Loomis St Brdg	584	ENG	3499296	3212908	41.846020	87.659565	26663
8	120312666400	25	26Th & Wstrn Upass	588	ENG	3492687	3211984	41.843840	87.683988	26664
	120312650500	50	Dan Ryan Exprsway	592	ENG	3503266	3213716	41.848024	87.644875	26505
10	120312651000	34	Stevenson Exprsway	592	ENG	3503281	3213057	41.846207	87.644869	26510
11	120312672400	20	Holden School	593	ENG	3500699	3210326	41.838826	87.654589	26724

12	120310317900	43	Blue Island Tunnel	591	ENG	3497214	3215459	41.853165	87.667048	03179
13	120310318500	43	Subway Boring	589	ENG	3499717	3215393	41.852844	87.657828	03185
4	120312562800	120	Chicago Blk Co	587	WATER	3494995	3212408	41.844881	87.675452	25628
15	120312666100	60	Dan Ryan Exprsway	590	ENG	3503235	3215035	41.851660	87.644890	26661
16	120312666200	54	Dan Ryan Exprsway	590	ENG	3503251	3214375	41.849840	87.644881	26662
17	120313034600	376	Metr Sanitry Dst Chicag	598	ENG	3502681	3210395	41.838905	87.647280	30346
18	120312978700	380	Chicago Block Co.	595	WATER	3493624	3213662	41.848412	87.680411	29787
19	120313085800	260	Chicago Block & Brick Co.	596	WATER	3493281	3213975	41.849294	87.681652	30858
20	120313147700	21	IL Dept. of Conservation	0	MONIT	3498056	3210232	41.838715	87.664334	31477
21	120313147800	20	IL Dept. of Conservatio	0	MONIT	3498056	3210232	41.838715	87.664334	31478
22	120313147900	20	IL Dept. of Conservation	0	MONIT	3498056	3210232	41.838715	87.664334	31479
23	120313141600	17	Coca-Cola Bottling Co.	595	MONIT	3497878	3215483	41.853194	87.664599	31416
24	120313141700	17	Coca-Cola Bottling Co.	0	MONIT	3497878	3215483	41.853194	87.664599	31417
25	120313277100	52	Dan Ryan Express over Chi. Sanitary	0	ENG	3503571	3214718	41.850768	87.643676	32771

More Records

Information and data presented were obtained from various Federal, State, and local agencies and are subject to revision.

ArcIMS HTML Viewer Map



ISGS Wells

Rec	API_NUMBER	TOTAL_DEPT	FARM_NAME	ELEVATION	STATUS	LAM_X	LAM_Y	LATITUDE	LONGITUDE	COUNTY_NO
26	120313397700	431	Stearns Quarry	593	STRAT	3502635	3212373	41.844358	87.647301	33977

Previous 25 Records

ILLINOIS
DEPARTMENT OF
NATURAL
RESOURCES

Illinois State Water Survey

Main Office • 2204 Griffith Drive • Champaign, IL 61820-7495 • *Tel (217) 333-2210 • Fax (217) 333-6540*
Peoria Office • P.O. Box 697 • Peoria, IL 61652-0697 • *Tel (309) 671-3196 • Fax (309) 671-3106*

SWS

7/11/2007

Mr. Ken Duwal
Conestoga-Rovers & Associates
8615 West Bryn Maur Avenue
Chicago, IL60631

RECEIVED
JUL 2 2007
CRA INC.
CHICAGO

Dear Mr. Duwal:

As you requested during our telephone conversation on July 11, 2007, we are enclosing printouts from our Wells Database and Illinois Water Inventory Program (IWIP) Database for the following locations:

COUNTY	TOWNSHIP	RANGE	SECTIONS
COOK	39 NORTH	14 EAST	17, 19, 20, 21, 28, 29, 30

No available information is indicated on the printout by the statement "0 records were found for the specified locations." Also enclosed are explanations of the Illinois State Water Survey Wells and IWIP Databases.

The data included in the Wells Database are those non-municipal wells which are known to the Illinois State Water Survey and the IWIP Database is an inventory of municipal well information and large industrial groundwater users. We may not have a copy of well records for these groundwater users.

The enclosed statement reflects the charges for this request which includes a $35.00 query fee for IWIP database information, a $35.00 query fee for Wells database information, and a $0.10 per page charge for 9 pages, plus a $5.00 shipping and handling fee, totaling $75.90.

If you have any questions or if I can be of further assistance, please call.

Sincerely,

Susie Casey

Susie Dodd-Casey
Associate Supportive Scientist
Center for Groundwater Science
Phone: (217) 333-9043

Enclosures as stated

Printed on recycled paper

ILLINOIS STATE WATER SURVEY
WELL DATABASE

The data in the well database is a listing of the non-community wells which are known to the Illinois state water survey (ISWS). This information has been entered verbatim from well logs submitted by the driller, chemical analysis reports, well sealing forms, well inventory forms, the 1930-1934 well survey, and other special projects. The accuracy of this data is controlled by those who submitted the form. Information in the well database has not been verified.

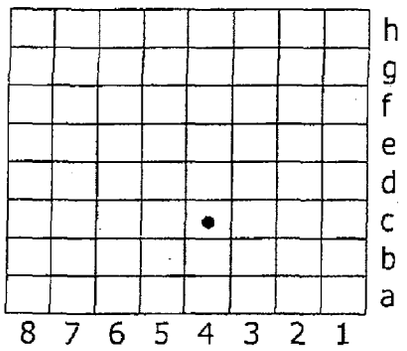
DATA EXPLANATION

P NUMBER	The unique identifier assigned to a point source. This field is used as the primary key to relate data among tables in the Groundwater Database.
FIPS	County code number
TWN	Civil township
RNG	Range
SEC	Section
PLOT	10-acre plot location with the section
OWNER	Well owner
DRILLER	Driller that drilled the well
DATE COMPLETED	Date well was completed
DEPTH	Last known depth of well
RECORD TYPE	**Type of paper record on file** R – Construction Record G – Geologic Record A – Sealing Affidavit C – Chemical Analysis Record I – ISWS Inventory Record L – Correlated Geologic Log M – Geologic Sample Study Log N – No Record O – Other Record P – Pump installation Record S – Sealing Record Z – No record available
USE	**Well usage** CO – Conservation CS - Community Supply DO - Domestic DW - Dewatering IC - Industrial / Commercial

	IN - Injection IR – Irrigation MO – Monitoring NC – Non-Community Supply NR – Not Reported OB – Observation OW – Other (Make Remark) PK – Park PZ – Piezometer RC – Recovery RE – Remediation RW – Relief SC – School ST – State TB – Test Boring TH – Test Hole TW – Test Well
WELL TYPE	**Type of well** AU – Auger BD – Bored CI – Cistern DL – Drilled DR – Driven DU – Dug GO – Geothermal NR – Not Reported NW – Non Well Point Source PR – Probed SG – Spring SP – Sandpoint
AQ TYPE	**Aquifer type** BR – Bedrock DH – Dry Hole NR – Not Reported UN – Unconsolidated Materials
STAT LVL	Static Level – The reported non-pumping water level
PUMP LVL	Pumping Level – The reported water level during initial pumping
PUMP GPM	Pumping GPM – Gallons per minute at time of construction
REMARKS	General remarks
SEALED	Date well was sealed

ISWS 10-ACRE PLOT LOCATION SYSTEM

Well locations consist of five parts: County code (FIPS), township, range, section, and a 10-acre plot within the section. Sections are divided into rows of 1/8-mile squares. Each of these squares contains 10 acres and corresponds to a quarter of a quarter of a quarter section. A normal section of one square mile contains eight rows of 1/8-mile squares; an odd-sized section contains more or fewer rows. Rows are numbered from east to west and lettered from south to north as shown in the diagram below.



10-Acre Plot Location System
(Plot shown = 4c)

ILLINOIS STATE WATER SURVEY
IWIP DATABASE

The data in the Illinois Water Inventory Program (IWIP) Database is a listing of municipal and commercial wells which are known to the Illinois State Water Survey (ISWS). This information was initially entered from public water supply data and supplemented with the Illinois State Water Inventory Project data. This database is updated as additional information is received and verified.

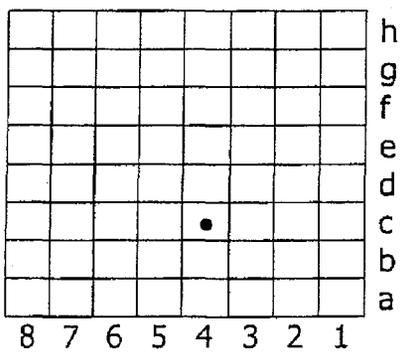
DATA EXPLANATION

P NUMBER	The unique ISWS record id number
FIPS	County code number
TWN	Civil township
RNG	Range
SEC	Section
PLOT	10-acre plot location with the section
OWNER	Well owner
DRILLER	Driller that drilled the well
DATE COMPLETED	Date well was completed
DEPTH	Last known depth of well
STATUS	IWIP well status A – Abandoned C – Capped D – Disconnected E – Emergency I – In use O – Observation P – Proposed S – Sealed U – Unused Z – No record available
RECORD TYPE	Type of paper record on file R – Construction Record G – Geologic Record A – Sealing Affidavit C – Chemical Analysis Record I – ISWS Inventory Record L – Correlated Geologic Log M – Geologic Sample Study Log N – No Record O – Other Record P – Pump installation Record S – Sealing Record

STAT LVL	Static Level – The reported non-pumping water level
PUMP LVL	Pumping Level – The reported water level during initial pumping
PUMP GPM	Pumping GPM – Gallons per minute at time of construction
REMARKS	General remarks
SEALED	Date well was sealed
ISWS FACILITY ID	Unique ISWS facility id number
WELL NUMBER	ISWS assigned point source number for the facility

ISWS 10-ACRE PLOT LOCATION SYSTEM

Point source locations consist of five parts: County code (FIPS), township, range, section, and a 10-acre plot within the section. Sections are divided into rows of 1/8-mile squares. Each of these squares contains 10 acres and corresponds to a quarter of a quarter of a quarter section. A normal section of one square mile contains eight rows of 1/8-mile squares; an odd-sized section contains more or fewer rows. Rows are numbered from east to west and lettered from south to north as shown in the diagram below.



10-Acre Plot Location System
(Plot shown = 4c)

Illinois State Water Survey I Database

Wednesday, July 11, 2007

County: COOK

Township: 39N

Range: 14E

Sections: 17,19,20,21,28,29,30

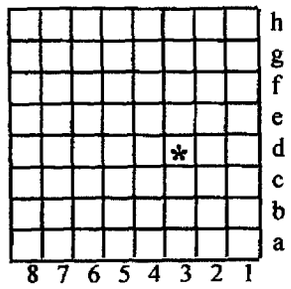
Records Found: 84

Questions: Contact the Illinois State Water Survey's Center for Groundwater Science @ (217)-333-9043

Publication: Please cite the Illinois State Water Survey's Well Database in all publications based wholly or partially on this information.

Note: The data listed in this printout includes non-municipal wells which are known to the Illinois State Water Survey (ISWS). This information has been entered verbatim from well logs submitted by the driller, chemical analysis reports, well sealing forms, well inventory forms from the 1930-1934 well survey, and other special projects. The accuracy of this data is controlled by those submitting the forms. Information in the Well Database has not been verified.

This data cannot be resold or redistributed. The Illinois State Water Survey must be acknowledged in any use of this material.



Location of a 10-acre-plot within a section:

The origin can be found at the lower right-hand-corner of an 8 x 8 grid. In this example, the well is in the 10-acre plot '3d'.

HK 01236

P NUM	FIP	N	RNG	SEC	PLOT	OWNER	DRILL	COMPLETED DATE	DEPTH	RECORD TYPE	USE	WELL TYPE	AQ TYPE	STA L	PUMP LVL	PUMP GPM
33415	031	..N	14E	17		CRACKER JACK CO (WELL A)		00/00/0000	380	O	IC		BR			
33691	031	39N	14E	17		FRANK STURGES		00/00/1899	250	O	DO		BR			
189822	031	39N	14E	17		CRACKER JACK CO		00/00/0000		O	IC	--	--			
REMARKS: condensing & drucking - not used since 1923																
23923	031	39N	14E	17		AUTO ELECTRIC CO		00/00/0000	280	O	IC		BR			
33814	031	39N	14E	17	1A	BARTHOLMAE & ROESING BREWERY		00/00/1914	1610	C	IC		BR			
33891	031	39N	14E	17	1A	U S ICE CO/BARTHOLOMAE & ROESI	MILLER	00/00/1910	1609	OCX	IC		BR			
33850	031	39N	14E	19		HOERBER BREWING CO	GEIGER	00/00/0000	350	OG	IC		BR			
33876	031	39N	14E	19		SCHOENHOFEN-EDELWEISS/NATIONAL	MILLER	00/00/1924	1948	O	IC		BR			
33877	031	39N	14E	19		SCHOENHOFEN-EDELWEISS/NATIONAL		00/00/1895	1800	O	IC		BR			
33878	031	39N	14E	19		SCHOENHOFEN-EDELWEISS/NATIONAL		00/00/1901	1590	OC	IC		BR			
33885	031	39N	14E	20		STEGER BREWING CO		00/00/0000	1750	O	IC		BR			
33832	031	39N	14E	20		DIENER CUT STONE CO		00/00/1934	250	I	IC		BR			
29247	031	39N	14E	20		GOLDENROD ICE CREAM	J P MILLER/GEIGER	00/00/1923	700	O	IC		BR			
23924	031	39N	14E	20		ATLAS BREWING CO		00/00/1934	120	O	IC		BR			
23925	031	39N	14E	20		BURTON-DIXIE CORP(SEALED&CAP)		00/00/0000		XO	IC		BR			

HK 01237

P NUM	FIPS	T	RNG	SEC	PLOT	OWNER	DRILL	COMPLETED DATE	DEPTH	RECORD TYPE	USE	WELL TYPE	AQ TYPE	STAT LV	PUMP LVL	PUMP GPM
23926	031	39N	14E	20		H L SCHROEDER		00/00/1890	150	O	DO					
235383	031	39N	14E	20		COCA-COLA BOTTLING CO.	JAVCO INC.	06/10/1992	17	RG	TW	--	UN	3		
REMARKS: ******** WELL MW-1 ********																
235411	031	39N	14E	20		COCA-COLA BOTTLING CO.	JAVCO INC.	06/17/1992	17	RG	TW	--	UN	5		
REMARKS: ******* WELL MW-2 *********																
306626	031	39N	14E	20	1A	CONCRETE PRODUCTION	JV MOORE	10/07/1998	1005	RG	IC	DL	BR	599	839	
REMARKS: CONCRETE PLANT																
33870	031	39N	14E	21		PURE CARBONIC CO		00/00/1900	1700	O	IC		BR			
242783	031	39N	14E	21		AMOCO OIL CO MW-4	ENVIRON CONSTRUC CO	06/11/1993	15	RG	MO	--	UN			
236461	031	39N	14E	21		AMOCO OIL CO. WELL MW-6	ENVIRO.CONST.CO.	05/24/1993	11	RG	MO	--	BR			
236462	031	39N	14E	21		AMOCO OIL CO. WELL MW-5	ENVIRO.CONST.CO.	05/24/1993	11	RG	MO	--	UN			
23927	031	39N	14E	21		BISHOP & BABCOCK CO "A"	J P MILLER	00/00/0000	1307	OG	IC		BR			
33826	031	39N	14E	21		CRANE CO		00/00/0000	250	O	IC		BR			
33827	031	39N	14E	21		CRANE CO		00/00/0000	290	O	IC		BR			
33828	031	39N	14E	21		CROOKS TERMINAL WORKS/CRANE CO		00/00/0000	450	O	IC		BR			
33890	031	39N	14E	21		UNION COLD STORAGE CO		00/00/0000	1135	O	IC		BR			
33858	031	39N	14E	21		KELLOGG TERMINAL WORKS	J P MILLER	00/00/1910	1600	OC	IC		BR			
33859	031	39N	14E	21		KELLOGG TERMINAL WORKS	J P MILLER	00/00/1900	2187	OC	IC		BR			

HK 01238

P NUM	FIPS	N	RNG	SEC	PLOT	OWNER	DRILL	COMPLETED DATE	DEPTH	RECORD TYPE	USE	WELL TYPE	AQ TYPE	STAT LV	PUMP LVL	PUMP GPM
33860	031	39N	14E	21		KELLOGG TERMINAL WORKS		00/00/1882	2180	O	IC		BR			
378100	031	39N	14E	21	4A	CORU 21 LLC	MEADOW EQUIPMENT/MARI	00/00/0000	1603	A	IC	DL				
								SEALED: 7/22/2005								
33856	031	39N	14E	21	7B	JOANNA WESTERN MILLS/WESTERN S	GEIGER	00/00/1940	1620	OGCI	IC		BR			
33857	031	39N	14E	21	7B	JOANNA WESTERN MILLS/WESTERN S	GEIGER	00/00/1945	1603	OGC	IC		BR			
33808	031	39N	14E	28		A P CALLAHAN CO (DUPLICATE)	GEIGER	00/00/1906	386	COG	IC		BR			
33862	031	39N	14E	28		LAKE SHORE & ROCK IS RR	GEIGER	00/00/0000	1612	OG	IC		BR			
33835	031	39N	14E	28		E K POND & CO		00/00/0000		O	IC					
33847	031	39N	14E	28		GOTTFRIEND BREWING CO	J P MILLER	00/00/1912	1658	OGC	IC		BR			
189826	031	39N	14E	28		LASALLE AUTO STORAGE		00/00/1934	300	O	IC	--	--			
REMARKS: FORMERLY MILLER & HART																
33854	031	39N	14E	28	2D	INLAND RUBBER CO	J P MILLER	00/00/1932	1937	RGOC	IC		BR			
23930	031	39N	14E	28	2F	A P CALLAHAN CO	GEIGER	00/00/1906	240	O	IC					
23931	031	39N	14E	29		BISMARCK BREWING CO/CITIZEN BR	J P MILLER	00/00/0000	2188	O	IC		BR			
33868	031	39N	14E	29		OMAHA PACKING CO (MOVED)		00/00/0000		I	IC		BR			
371023	031	39N	14E	29	1D	CITY OF CHICAGO		00/00/0000	-999	A	~~	DL				
REMARKS: NOT A MUNICIPAL WELL								SEALED: 10/19/2004								
236458	031	39N	14E	29	8B	IL.DEPT. OF CONSERVATION	C S DRILLING	05/11/1993	21	RG	MO	--	UN			
REMARKS: ******* WELL MW-5 *********																

HK 01239

P NUM	FIPS	N	RNG	SEC	PLOT	OWNER	DRILL	COMPLETED DATE	DEPTH	RECORD TYPE	USE	WELL TYPE	AQ TYPE	STAT L'	PUMP LVL	PUMP GPM
236459	031	N	14E	29	8B	IL.DEPT.OF CONSERVATION	C S DRIL...G	05/12/1993	20	RG	MO	--	UN			
REMARKS: ******** WELL MW-2 *********																
236460	031	39N	14E	29	8B	IL DEPT.OF CONSERVATION	C S DRILLING	05/12/1993	20	RG	MO	--	UN			
REMARKS: ******* WELL MW-6 ********																
351154	031	39N	14E	29	8E	VALSPAR CORPORATION	R.W. COLLINS		9	A		DL				
								SEALED: 6/6/2002								
351173	031	39N	14E	29	8E	VALSPAR CORPORATION	CS DRILLING		9	A		DL				
REMARKS: P-3								SEALED: 4/18/2002								
351174	031	39N	14E	29	8E	VALSPAR CORPORATION	CS DRILLING		9	A		DL				
REMARKS: P-4								SEALED: 4/18/2002								
351175	031	39N	14E	29	8E	VALSPAR CORPORATION	CS DRILLING		10	A		DL				
REMARKS: P-5								SEALED: 4/18/2002								
351176	031	39N	14E	29	8E	VALSPAR CORPORATION	CS DRILLING		9	A		DL				
REMARKS: REC2-B-2								SEALED: 4/18/2002								
351177	031	39N	14E	29	8E	VALSPAR CORPORATION	CS DRILLING		6	A		DL				
REMARKS: REC8-B-1								SEALED: 4/18/2002								
351178	031	39N	14E	29	8E	VALSPAR CORPORATION	CS DRILLING		6	A		DL				
REMARKS: REC8-B-2								SEALED: 4/18/2002								
351179	031	39N	14E	29	8E	VALSPAR CORPORATION	CS DRILLING		6	A		DL				
REMARKS: REC8-B-3								SEALED: 4/18/2002								
351180	031	39N	14E	29	8E	VALSPAR CORPORATION	CS DRILLING		12	A		DL				
REMARKS: MW-1								SEALED: 4/18/2002								
351181	031	39N	14E	29	8E	VALSPAR CORPORATION	CS DRILLING		15	A		DL				
REMARKS: MW-5								SEALED: 4/18/2002								
351182	031	39N	14E	29	8E	VALSPAR CORPORATION	CS DRILLING		14	A		DL				
REMARKS: MW-6								SEALED: 4/18/2002								
351183	031	39N	14E	29	8E	VALSPAR CORPORATION	CS DRILLING		13	A		DL				
REMARKS: MW-11								SEALED: 4/18/2002								
351184	031	39N	14E	29	8E	VALSPAR CORPORATION	CS DRILLING		12	A		DL				
REMARKS: MW-12								SEALED: 4/18/2002								

HK 01240

P NUM	FIP	N	RNG	SEC	PLOT	OWNER	DRIL	COMPLETED DATE	DEPTH	RECORD TYPE	USE	WELL TYPE	AQ TYPE	ST L	PUMP LVL	PUMP GPM
351185	031	N	14E	29	8E	VALSPAR CORPORATION	CS DRILLING		12	A		DL				
REMARKS: MW-13								**SEALED:** 4/18/2002								
351186	031	39N	14E	29	8E	VALSPAR CORPORATION	CS DRILLING		13	A		DL				
REMARKS: MW-14								**SEALED:** 4/18/2002								
351187	031	39N	14E	29	8E	VALSPAR CORPORATION	CS DRILLING		34	A		DL				
REMARKS: MW-15								**SEALED:** 4/18/2002								
189823	031	39N	14E	30		INTER HARVESTOR	GEIGER	00/00/1905	1745	O	IC	--	BR			
REMARKS: out of service since 1920																
33770	031	39N	14E	30		INTERNATIONAL HARVESTER	GEIGER	00/00/1905	1659	O	IC		BR			
33817	031	39N	14E	30		CHICAGO BLOCK CO	K & K	05/08/1979	380	RG	IC		BR			
33818	031	39N	14E	30		CHICAGO BLOCK CO	K & K	03/09/1977	120	RG	IC		BR			
378054	031	39N	14E	30	1A	UNION PACIFIC RAILROAD #MW-201	DRILLING UNLIMITED, INC	00/00/2004	13	A	MO	DL				
								SEALED: 1/19/2006								
23932	031	39N	14E	30	1H	CHICAGO CURLED HAIR CO		00/00/1895	350	O	IC					
378066	031	39N	14E	30	2A	UNION PACIFIC RAILROAD #MW-GF-2	DRILLING UNLIMITED, INC	00/00/1995	-999	A	MO	DL				
378067	031	39N	14E	30	2A	UNION PACIFIC RAILROAD #MW-B-36	DRILLING UNLIMITED, INC	00/00/1995	-999	A	MO	DL				
								SEALED: 1/19/2006								
33831	031	39N	14E	30	2B	DIAMOND GLUE CO		00/00/0000	1950	OS	IC		BR			
REMARKS: SEALED PER NOTE ON WELL LOG																
378064	031	39N	14E	30	3A	UNION PACIFIC RAILROAD #MW-4	DRILLING UNLIMITED, INC	00/00/2000	15	A	MO	DL				
								SEALED: 1/19/2006								
378065	031	39N	14E	30	3A	UNION PACIFIC RAILROAD #MW-5	DRILLING UNLIMITED, INC	00/00/2000	15	A	MO	DL				
								SEALED: 1/19/2006								
378055	031	39N	14E	30	3A	UNION PACIFIC RAILROAD #MW-202	DRILLING UNLIMITED, INC	00/00/2004	13	A	MO	DL				
								SEALED: 1/19/2006								

HK 01241

P NUM	FIPS	T	RNG	SEC	PLOT	OWNER	DRILL	COMPLETED DATE	DEPTH	RECORD TYPE	USE	WELL TYPE	AQ TYPE	STAT LV	PUMP LVL	PUMP GPM
378056	031	39N	14E	30	3B	UNION PACIFIC RAILROAD #MW-203	DRILLING UNLIMITED, INC	00/00/2004	13	A	MO	DL				
								SEALED: 1/19/2006								
378068	031	39N	14E	30	3B	UNION PACIFIC RAILROAD #MW-FA-4	DRILLING UNLIMITED, INC	00/00/1995	-999	A	MO	DL				
								SEALED: 1/19/2006								
378062	031	39N	14E	30	3B	UNION PACIFIC RAILROAD #MW-215	DRILLING UNLIMITED, INC	00/00/2004	13	A	MO	DL				
								SEALED: 1/19/2006								
378057	031	39N	14E	30	4A	UNION PACIFIC RAILROAD #MWP-204	DRILLING UNLIMITED, INC	00/00/2004	13	A	MO	DL				
								SEALED: 1/19/2006								
378059	031	39N	14E	30	5A	UNION PACIFIC RAILROAD #MW-206	DRILLING UNLIMITED, INC	00/00/2004	13	A	MO	DL				
								SEALED: 1/19/2006								
378060	031	39N	14E	30	5A	UNION PACIFIC RAILROAD #MW-207	DRILLING UNLIMITED, INC	00/00/2004	13	A	MO	DL				
								SEALED: 1/19/2006								
378058	031	39N	14E	30	5B	UNION PACIFIC RAILROAD #MW-205	DRILLING UNLIMITED, INC	00/00/2004	13	A	MO	DL				
								SEALED: 1/19/2006								
235060	031	39N	14E	30	7G	CHICAGO BLOCK & BRICK CO.	K & K DRILLING	10/26/1992	260	RG	IC	--	BR	99	200	
373374	031	39N	14E	30	8C	UNKNOWN		00/00/0000	5	A	--	DL				
								SEALED: 7/8/2005								

HK 01242

Illinois State Water Survey I P Database

Wednesday, July 11, 2007

County: COOK

Township: 39N

Range: 14E

Sections: 17,19,20,21,28,29,30

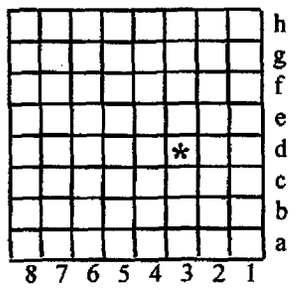
Records Found: 1

Questions: Contact the Illinois State Water Survey's Center for Groundwater Science @ (217)-333-9043

Publication: Please cite the Illinois State Water Survey's IWIP (Illinois Water Inventory Program) Database in all publications based wholly or partially this information.

Note: The data in the IWIP Database is a listing of municipal and commercial wells which are known to the Illinois State Water Survey (ISWS). This information was initiall entered from public water supply data and supplemented with the Illinois State Water Inventory Project data. This database is updated as additional information is received and verified.

This data cannot be resold or redistributed. The Illinois State Water Survey must be acknowledged in any use of this material.



Location of a 10-acre-plot within a section:

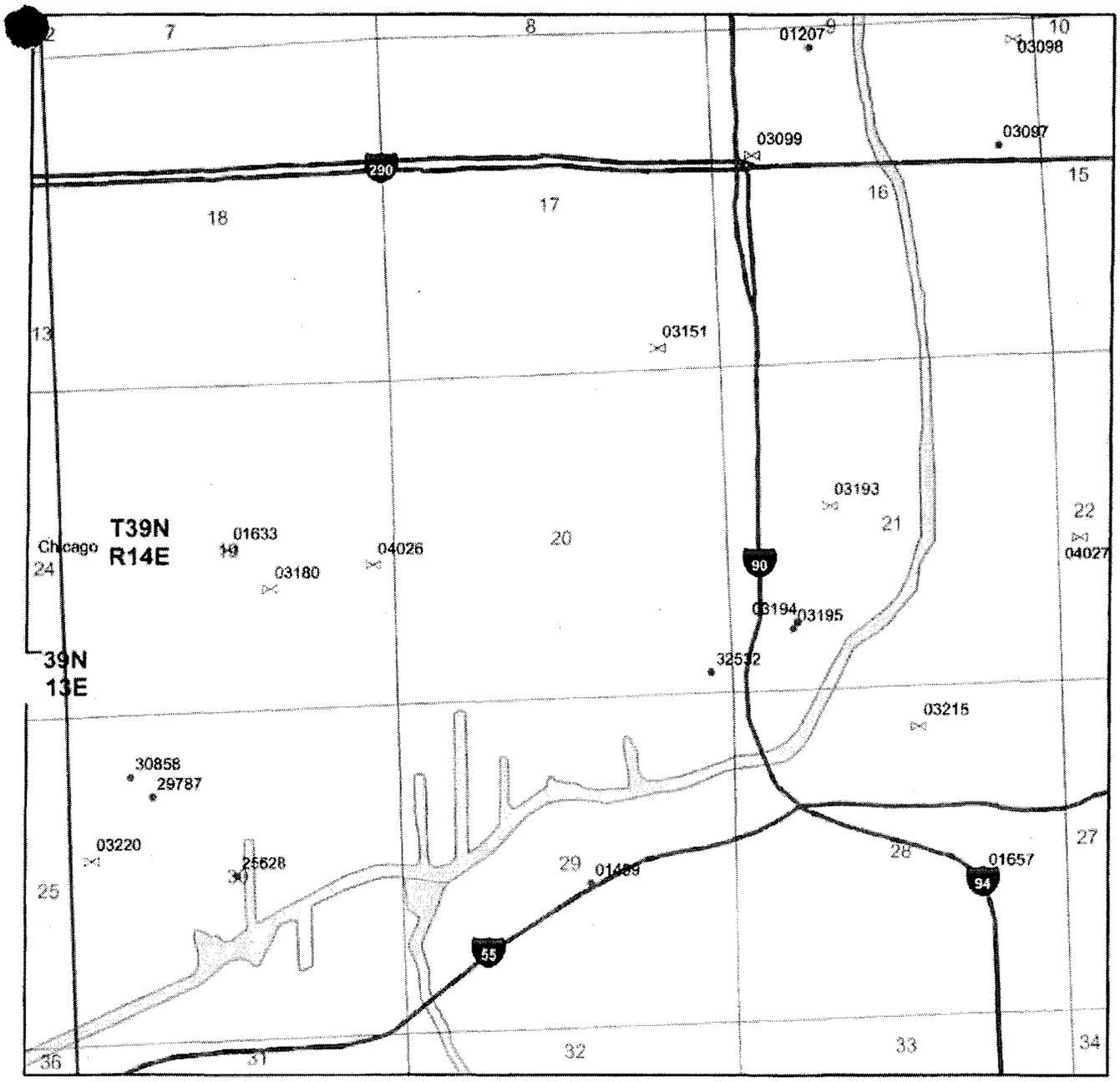
The origin can be found at the lower right-hand-corner of an 8 x 8 grid. In this example, the well is in the 10-acre plot '3d'.

HK 01243

P NUM	FIP	WN	RNG	SEC	PLOT	OWNER	R	COMPLETED DATE	DEPTH	STATUS	RECORD TYPE	ST L	PUMP LVL	PUMP GPM
401098	031	39N	14E	21	7B	INDUSTRIAL COATING GROUP,INC			1610	U				

ISWS FACILITY ID: 03121630 **WELL NUMBER:** 1

HK 01244



Explanation

Water	D&A - Gas Show	Junked
Engineering	D&A	Temporarily Abandoned
Oil	Gas Injection	Observation
Oil & Gas	Gas Storage	Other Injection
Gas	Salt Water Disposal	Other Well Type
D&A - Oil Show	Water Injection	Unknown
D&A - Oil & Gas Show	Water Supply	

/ through any symbol indicates well is currently plugged

N

Illinois State Geological Survey

QuESToR: Custom Map

0 750 1,500 3,000 4,500 6,000 Feet

Scale: 1:28,229

Displayed data are based upon information supplied to the Illinois State Geological Survey (ISGS) and are not field verified. The ISGS does not guarantee the validity, accuracy, or completeness of these data.

120310309700 Chicago Post Office 16-39N-14E
Cook Geiger, S. B. Co. SE NE
Well Status: WATER - Water Well
Compdate: 10/01/1902 Plugdate: TD: 1350
Elevation: 589' GL Permit #: Permit Date:
Latitude: 41.876483 Longitude: -87.630099

Logs Run: Driller's Log

Formations:				
259SLRN	98 -	Silurian	Cook County Study.
203MQKT	420 -	Maquoketa	Cook County Study.
202GLEN	580 -	Galena	Cook County Study.
202SPTR	905 -	St Peter	Cook County Study.

120310309800 Edelweiss Restuarant 16-39N-14E
Cook Miller, J. P. Art. Well NE NE NE
Well Status:
Compdate: Plugdate: TD: 1280
Elevation: 593' GL Permit #: Permit Date:
Latitude: 41.881075 Longitude: -87.629191

Logs Run: Driller's Log

Formations:				
259SLRN	103 -	Silurian	Cook County Study.
203MQKT	405 -	Maquoketa	Cook County Study.
202GLEN	570 -	Galena	Cook County Study.
202SPTR	893 -	St Peter	Cook County Study.

0310309900 Fortune Bros Brew 16-39N-14E
ook Geiger, S. B. Co. SW NW
Well Status:
Compdate: Plugdate: TD: 1679
Elevation: 593' GL Permit #: Permit Date:
Latitude: 41.876251 Longitude: -87.644642

Logs Run: Driller's Log

120310120700 Ill Bell Tele 16-39N-14E
Cook Wehling Well Works Inc. NW NE NW
Well Status: WATER - Water Well
Compdate: 07/01/1970 Plugdate: TD: 1689
Elevation: 594' TM Permit #: 9084 Permit Date: 02/05/1970
Latitude: 41.880899 Longitude: -87.641243

Logs Run: Driller's Log

Formations:				
259SLRN	115 -	Silurian	Cook County Study.
203MQKT	430 -	Maquoketa	Cook County Study.
202GLEN	573 -	Galena	Cook County Study.
202SPTR	910 -	St Peter	Cook County Study.
153IRNN	1420 -	Ironton	Cook County Study.
153ECLR	1619 -	Eau Claire	Cook County Study.

120310315100 U S Brewing Co 17-39N-14E
Cook Miller, J. P. Art. Well SW SE SE

Well Status:
Compdate: Plugdate: TD: 1609
Elevation: 595' TM Permit #: Permit Date:
Latitude: 41.867875 Longitude: -87.650336

Logs Run: Driller's Log

Formations:				
203MQKT	492 -	Maquoketa	Regional Study.
202GLEN	595 -	Galena	Regional Study.
202SPTR	985 -	St Peter	Regional Study.
153IRNN	1448 -	Ironton	Regional Study.

120310318000 National Beverage 19-39N-14E
Cook Miller, J. P. Art. Well NW SE

Well Status:
Compdate: Plugdate: TD: 1949
Elevation: 598' TM Permit #: Permit Date:
Latitude: 41.857585 Longitude: -87.673304

Logs Run: Driller's Log

Formations:				
259SLRN	8 -	Silurian	Cook County Study.
203MQKT	365 -	Maquoketa	Cook County Study.
202GLEN	545 -	Galena	Cook County Study.
202SPTR	866 -	St Peter	Cook County Study.
153IRNN	1385 -	Ironton	Cook County Study.
153ECLR	1570 -	Eau Claire	Cook County Study.

:0310163300 National Brew Co 19-39N-14E
.ook Miller, J. P. Art. Well

Well Status:
Compdate: Plugdate: TD: 1590
Elevation: 600' TM Permit #: Permit Date:
Latitude: 41.859359 Longitude: -87.6758

Logs Run: Driller's Log

Formations:				
259SLRN	14 -	Silurian	Cook County Study.
203MQKT	390 -	Maquoketa	Cook County Study.
202GLEN	555 -	Galena	Cook County Study.
202SPTR	870 -	St Peter	Cook County Study.
153IRNN	1391 -	Ironton	Cook County Study.

120310402600 Whiteeagle Brew Co 19-39N-14E
Cook Miller J P Co NE NE SE

Well Status:
Compdate: Plugdate: TD: 1620
Elevation: 598' TM Permit #: Permit Date:
Latitude: 41.858568 Longitude: -87.667182

Logs Run: Driller's Log

Formations:				
203MQKT	402 -	Maquoketa	Cook County Study.
202GLEN	555 -	Galena	Cook County Study.
202SPTR	880 -	St Peter	Cook County Study.
153IRNN	1402 -	Ironton	Cook County Study.
153ECLR	1619 -	Eau Claire	Cook County Study.

120313253200 Concrete Prod. Services 20-39N-14E
Cook Walters, Larry SE SE SE
Well Status: WATER - Water Well
Compdate: 10/07/1998 Plugdate: TD: 1005
Elevation: 590' GL Permit #: 031-001 Permit Date: 09/24/1998
Latitude: 41.853455 Longitude: -87.647399
Owner Address: [redacted]
Well Address: 11400 Old Lemont Rd. Lemont, IL Lot: Subd:
Well Type: SEMIP - Semi-Private Water Well
Water Bearing Formation: rock 45 to 1005 ft
Static Water Level: 600 ft. below casing top of 1 ft. Hole Diam.: 8 in.
Pumping Level: 840 ft. when pumping at gpm for 4 hours.

Casing and Liner Pipe:	Diam. (in.)	Kind and Weight	From(ft)	
	5	BLACK STEEL	-1	45
	7	BLACK STEEL LINER	0	354

Size hole below casing: 7.75 in.

Formations: 259SLRN 66 - Silurian Cook County Study.

Driller's Log:

0 -	66	white rock
66 -	74	hard gray shale
74 -	112	brown rock
112 -	310	hard gray shale
310 -	675	brown rock
675 -	804	white sandstone
804 -	1005	brown rock

?0310319300 Bishop Babcock & Co 21-39N-14E
ook Miller J P Co SW SE NW
Well Status:
Compdate: Plugdate: TD: 1307
Elevation: 596' TM Permit #: Permit Date:
Latitude: 41.860795 Longitude: -87.640332

Logs Run: Driller's Log

Formations:

259SLRN	73 -	Silurian	Cook County Study.
203MQKT	410 -	Maquoketa	Cook County Study.
202GLEN	560 -	Galena	Cook County Study.
202SPTR	897 -	St Peter	Cook County Study.

120310319400 Western Shade Cloth 21-39N-14E
Cook Geiger, S. B. Co. 1100'S line, 1075'W line,
Well Status: WATER - Water Well
Compdate: 01/01/1940 Plugdate: TD: 1620
Elevation: 590' GL Permit #: Permit Date:
Latitude: 41.855651 Longitude: -87.642283

Logs Run: Geologic Tops
Survey Sample Study

Formations:				
259SLRN	78 -	Silurian	Cook County Study.
203MQKT	408 -	Maquoketa	Cook County Study.
202GLEN	557 -	Galena	Cook County Study.
202SPTR	887 -	St Peter	Cook County Study.
153IRNN	1402 -	Ironton	Cook County Study.
153ECLR	1615 -	Eau Claire	Cook County Study.

120310319500 Western Shade Cloth 21-39N-14E
Cook Geiger, S. B. Co. 1000'S line, 1000'W line,
Well Status: WATER - Water Well
Compdate: 01/01/1945 Plugdate: TD: 1603
Elevation: 591' TM Permit #: Permit Date:
Latitude: 41.855371 Longitude: -87.642549

Logs Run: Driller's Log
Geologic Tops
Survey Sample Study

Formations:				
259SLRN	77 -	Silurian	Cook County Study.
203MQKT	415 -	Maquoketa	Cook County Study.
202GLEN	556 -	Galena	Cook County Study.
202SPTR	887 -	St Peter	Cook County Study.
153IRNN	1400 -	Ironton	Cook County Study.
153ECLR	1598 -	Eau Claire	Cook County Study.

120310402700 Union Cold Storage 22-39N-14E
ook Union Cold Storage NW NW SW
Well Status:
Compdate: Plugdate: TD: 1135
Elevation: 593' GL Permit #: Permit Date:
Latitude: 41.859205 Longitude: -87.625608

Logs Run: Driller's Log

Formations:				
259SLRN	90 -	Silurian	Cook County Study.
203MQKT	415 -	Maquoketa	Cook County Study.

120310321500 28-39N-14E
Cook Gottfried & Brewing W2 NW NE
Well Status:
Compdate: Plugdate: TD: 1659
Elevation: 596' TM Permit #: Permit Date:
Latitude: 41.850901 Longitude: -87.635224

Logs Run: Driller's Log

Formations:				
259SLRN	71 -	Silurian	Cook County Study.
203MQKT	427 -	Maquoketa	Cook County Study.
202GLEN	573 -	Galena	Cook County Study.
202SPTR	897 -	St Peter	Cook County Study.
153IRNN	1420 -	Ironton	Cook County Study.
153ECLR	1618 -	Eau Claire	Cook County Study.

120310165700 Inland Rubber Co 28-39N-14E
Cook Miller, J. P. Art. Well 2240'S line, 1320'E line, SE

Well Status: WATER - Water Well
Compdate: 09/01/1932 Plugdate: TD: 1936
Elevation: 605' GL Permit #: Permit Date:
Latitude: 41.844401 Longitude: -87.63149

Logs Run: Driller's Log
Geologic Tops
Survey Sample Study

Formations:				
259SLRN	34 -	Silurian	Cook County Study.
203MQKT	410 -	Maquoketa	Cook County Study.
202GLEN	580 -	Galena	Cook County Study.
202SPTR	900 -	St Peter	Cook County Study.
153IRNN	1440 -	Ironton	Cook County Study.
153ECLR	1615 -	Eau Claire	Cook County Study.

120310149900 Citizens Brewing 29-39N-14E
Cook No Company NW NW SE
Well Status: WATER - Water Well
Compdate: 09/01/1914 Plugdate: TD: 2188
Elevation: 600' TM Permit #: Permit Date:
Latitude: 41.844287 Longitude: -87.654675

Formations:			
203MQKT	350 -	Maquoketa	Cook County Study.
202GLEN	572 -	Galena	Cook County Study.

120312562800 Chicago Blk Co 30-39N-14E
Cook K & K Well Drilling
Well Status: WATER - Water Well
Compdate: 03/01/1977 Plugdate: TD: 120
Elevation: 587' GL Permit #: Permit Date:
Latitude: 41.844898 Longitude: -87.675484

Logs Run: Driller's Log

Formations:			
259SLRN	65 -	Silurian	Cook County Study.

120313085800 Chicago Block & Brick Co. 30-39N-14E
Cook Knierim, Phil SE NW NW
Well Status: WATER - Water Well
Compdate: 10/26/1992 Plugdate: TD: 260
Elevation: 596' GL Permit #: Permit Date: 10/14/1992
Latitude: 41.849311 Longitude: -87.681685

Owner Address: 6400 W. 41st St. Forest View IL
Well Type: PRIV - Private Water Well
Water Bearing Formation: rock 70 to 260 ft
Static Water Level: 100 ft. below casing top of 1 ft. Hole Diam.: 5 in.
Pumping Level: 200 ft. when pumping at gpm for 4 hours.

Casing and Liner Pipe:	**Diam. (in.)**	Kind and Weight	From(ft)	
	5	BLACK T&C	0	70

Size hole below casing: 4.75 in.

Formations:			
259SLRN	**70 -**	**Silurian**	Cook County Study.

Driller's Log:

0 -	2	top soil
2 -	70	clay
70 -	260	rock

120312978700 Chicago Block Co. 30-39N-14E
Cook Knierim, Phil NW
Well Status: WATER - Water Well
Compdate: 05/08/1979 Plugdate: TD: 380
Elevation: 595' GL Permit #: 82921 Permit Date: 12/13/1978
Latitude: 41.848429 Longitude: -87.680444

Owner Address: [redacted]
Well Address: Lot: 84 Subd: Sanit. Dist. Trustee
Well Type: INDUS - Industrial Water Well
Water Bearing Formation: limestone 68 to 380 ft
Static Water Level: 100 ft. below casing top of 2 ft. Hole Diam.: 5 in.
Pumping Level: 160 ft. when pumping at gpm for hours.

Casing and Liner Pipe:	Diam. (in.)	Kind and Weight	From(ft)	
	5	GALV PIPE	0	68

Size hole below casing: 5 in.

Formations: 259SLRN 68 - Silurian Cook County Study.

Driller's Log: 0 - 68 overburden
68 - 380 limestone

120310322000 Internatl Harvester 30-39N-14E
Cook Geiger, S. B. Co. SW SW NW
Well Status:
Compdate: Plugdate: TD: 1745
Elevation: 598' TM Permit #: Permit Date:
Latitude: 41.845661 Longitude: -87.684057

Logs Run: Driller's Log
Geologic Tops

Formations: 259SLRN 34 - Silurian Cook County Study.
202SPTR 830 - St Peter Cook County Study.
153ECLR 1565 - Eau Claire Cook County Study.

APPENDIX G

UNDERGROUND UTILITY INFORMATION

REFERENCE NO. 39826
APPENDIX G
UNDERGROUND UTILITY INFORMATION
CHICAGO OFFICE OF UNDERGROUND COORDINATION

CONESTOGA-ROVERS
& ASSOCIATES
1801 Old Highway 8 N.W., Suite #114
St. Paul, Minnesota 55112
Worldwide Engineering, Environmental, Construction, and IT Services

IMAGE ON FILE

APPENDIX H

STL ANALYTICAL REPORT - PHASE 1

SEVERN TRENT STL

STL North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

Tel: 330 497 9396 Fax: 330 497 0772
www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. 39826

H. KRAMER CHICAGO

Lot #: A5F160286

Julie Czech

Conestoga-Rovers & Associates
8615 W. Bryn Mawr
Chicago, IL 60631

SEVERN TRENT LABORATORIES, INC.

Ken Kruger for
Amy L. McCormick
Project Manager

June 30, 2005

CASE NARRATIVE
A5F160286

The following report contains the analytical results for sixteen solid samples submitted to STL North Canton by Conestoga-Rovers & Associates, Inc. from the H. Kramer Chicago Site, project number 39826. The samples were received June 16, 2005, according to documented sample acceptance procedures.

STL utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Julie Czech on June 28, 2005. A summary of QC data for these analyses is included at the back of the report.

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

All solid sample results are reported on an "as received" basis unless otherwise indicated by a dry weight adjustment footnote at the bottom of the analytical report page. The list of parameters which are never reported on a dry weight basis is included on the Sample Summary.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Amy L. McCormick, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT." The total number of pages in this report is 83.

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperature of the cooler upon sample receipt was 2.3°C.

CASE NARRATIVE (continued)

METALS

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive of mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

The sample(s) had elevated reporting limits due to matrix interferences. Refer to the sample report pages for the affected analyte(s) flagged with "G".

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "J". Refer to the sample report pages for the affected analyte(s).

Matrix spike recovery and relative percent difference (RPD) data were not calculated for some analytes for batch(s) 5168039 due to the sample concentration reading greater than four times the spike amount. See the Matrix Spike Report for the affected analytes which will be flagged with "NC, MSB".

The matrix spike/matrix spike duplicate(s) for batch(es) 5168039 had RPD's and recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. STL North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples. These QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. The only exception is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed below.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals
Methylene chloride	Phthalate Esters	Copper
Acetone		Iron
2-Butanone		Zinc
		Lead*

- *for analyses run on TJA Trace ICP, ICPMS or GFAA only*

QUALITY CONTROL ELEMENTS OF SW-846 METHODS
(Continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepped and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepped and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide, PCB, and PAH methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria.

STL North Canton Certifications and Approvals:

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225), Illinois (#200004), Kansas (#E10336), Massachusetts (#M-OH048), Maryland (#272), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), North Carolina (#39702), Ohio (#6090), OhioVAP (#CL0024), Rhode Island (#237), South Carolina (#92007001, #92007002, #92007003), Tennessee (#02903), Utah (#QUAN9), Virginia (#00011), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit, ACIL Seal of Excellence – Participating Lab Status Award (#82)

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EXECUTIVE SUMMARY - Detection Highlights

A5F160286

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-061405-WP-001 06/14/05 11:50 001				
Mercury	1.2	0.11	mg/kg	SW846 7471A
Arsenic	21.1	1.1	mg/kg	SW846 6010B
Lead	3870	3.3	mg/kg	SW846 6010B
Selenium	2.3	0.55	mg/kg	SW846 6010B
Thallium	1.3	1.1	mg/kg	SW846 6010B
Aluminum	6430	22.1	mg/kg	SW846 6010B
Antimony	14.9	6.6	mg/kg	SW846 6010B
Barium	1550 J	22.1	mg/kg	SW846 6010B
Beryllium	2.2	0.55	mg/kg	SW846 6010B
Cadmium	29.5	0.55	mg/kg	SW846 6010B
Calcium	51000 J	553	mg/kg	SW846 6010B
Chromium	47.5 J	1.1	mg/kg	SW846 6010B
Cobalt	7.9	5.5	mg/kg	SW846 6010B
Copper	4390 J	2.8	mg/kg	SW846 6010B
Iron	35700	11.1	mg/kg	SW846 6010B
Magnesium	16200 J	553	mg/kg	SW846 6010B
Manganese	942 J	1.7	mg/kg	SW846 6010B
Nickel	83.8	4.4	mg/kg	SW846 6010B
Potassium	1040 J	553	mg/kg	SW846 6010B
Silver	3.0	1.1	mg/kg	SW846 6010B
Sodium	1710	553	mg/kg	SW846 6010B
Vanadium	24.1 J	5.5	mg/kg	SW846 6010B
Zinc	15000	111	mg/kg	SW846 6010B
Percent Solids	90.3	10.0	%	MCAWW 160.3 MOD
S-061405-WP-002 06/14/05 12:00 002				
Mercury	0.19	0.10	mg/kg	SW846 7471A
Arsenic	3.2	1.0	mg/kg	SW846 6010B
Lead	1250	1.5	mg/kg	SW846 6010B
Selenium	1.7	0.51	mg/kg	SW846 6010B
Aluminum	1770	20.5	mg/kg	SW846 6010B
Antimony	1.5 B	6.1	mg/kg	SW846 6010B
Barium	78.1 J	20.5	mg/kg	SW846 6010B
Beryllium	0.74	0.51	mg/kg	SW846 6010B
Cadmium	16.1	0.51	mg/kg	SW846 6010B
Calcium	144000 J	2560	mg/kg	SW846 6010B
Chromium	15.5 J	1.0	mg/kg	SW846 6010B
Cobalt	2.1 B	5.1	mg/kg	SW846 6010B
Copper	1810 J	2.6	mg/kg	SW846 6010B
Iron	6090	10.2	mg/kg	SW846 6010B
Magnesium	83400 J	2560	mg/kg	SW846 6010B
Manganese	239 J	1.5	mg/kg	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A5F160286

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-061405-WP-002 06/14/05 12:00 002				
Nickel	30.5	4.1	mg/kg	SW846 6010B
Potassium	555 J	512	mg/kg	SW846 6010B
Silver	1.4	1.0	mg/kg	SW846 6010B
Sodium	1200	512	mg/kg	SW846 6010B
Vanadium	6.4 J	5.1	mg/kg	SW846 6010B
Zinc	10400	102	mg/kg	SW846 6010B
Percent Solids	97.6	10.0	%	MCAWW 160.3 MOD
S-061405-WP-003 06/14/05 12:10 003				
Mercury	0.42	0.11	mg/kg	SW846 7471A
Arsenic	33.2	1.1	mg/kg	SW846 6010B
Lead	52400	66.7	mg/kg	SW846 6010B
Selenium	7.7	0.56	mg/kg	SW846 6010B
Thallium	1.5	1.1	mg/kg	SW846 6010B
Aluminum	2000	22.2	mg/kg	SW846 6010B
Barium	230 J	22.2	mg/kg	SW846 6010B
Beryllium	2.9	0.56	mg/kg	SW846 6010B
Cadmium	234	0.56	mg/kg	SW846 6010B
Calcium	27800 J	556	mg/kg	SW846 6010B
Chromium	24.3 J	1.1	mg/kg	SW846 6010B
Cobalt	2.6 B	5.6	mg/kg	SW846 6010B
Copper	8220 J	55.6	mg/kg	SW846 6010B
Iron	7630	11.1	mg/kg	SW846 6010B
Magnesium	11700 J	556	mg/kg	SW846 6010B
Manganese	212 J	1.7	mg/kg	SW846 6010B
Nickel	69.7	4.4	mg/kg	SW846 6010B
Potassium	280 B,J	556	mg/kg	SW846 6010B
Silver	28.8	1.1	mg/kg	SW846 6010B
Sodium	31000	556	mg/kg	SW846 6010B
Vanadium	6.8 J	5.6	mg/kg	SW846 6010B
Zinc	342000	2220	mg/kg	SW846 6010B
Percent Solids	90.0	10.0	%	MCAWW 160.3 MOD
S-061405-WP-004 06/14/05 12:20 004				
Mercury	0.65	0.12	mg/kg	SW846 7471A
Arsenic	11.2	1.2	mg/kg	SW846 6010B
Lead	8790	7.2	mg/kg	SW846 6010B
Selenium	3.0	0.60	mg/kg	SW846 6010B
Thallium	1.1 B	1.2	mg/kg	SW846 6010B
Aluminum	3500	24.1	mg/kg	SW846 6010B
Antimony	3.8 B	7.2	mg/kg	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A5F160286

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-061405-WP-004 06/14/05 12:20 004				
Barium	248 J	24.1	mg/kg	SW846 6010B
Beryllium	6.1	0.60	mg/kg	SW846 6010B
Cadmium	76.1	0.60	mg/kg	SW846 6010B
Calcium	43800 J	601	mg/kg	SW846 6010B
Chromium	52.9 J	1.2	mg/kg	SW846 6010B
Cobalt	6.2	6.0	mg/kg	SW846 6010B
Copper	11600 J	60.1	mg/kg	SW846 6010B
Iron	34100	12.0	mg/kg	SW846 6010B
Magnesium	14400 J	601	mg/kg	SW846 6010B
Manganese	665 J	1.8	mg/kg	SW846 6010B
Nickel	188	4.8	mg/kg	SW846 6010B
Potassium	537 B,J	601	mg/kg	SW846 6010B
Silver	6.4	1.2	mg/kg	SW846 6010B
Sodium	7000	601	mg/kg	SW846 6010B
Vanadium	12.7 J	6.0	mg/kg	SW846 6010B
Zinc	64300	241	mg/kg	SW846 6010B
Percent Solids	83.2	10.0	%	MCAWW 160.3 MOD
S-061405-WP-005 06/14/05 12:35 005				
Mercury	0.33	0.11	mg/kg	SW846 7471A
Arsenic	9.1	1.1	mg/kg	SW846 6010B
Lead	5150	6.4	mg/kg	SW846 6010B
Selenium	2.2	0.53	mg/kg	SW846 6010B
Thallium	0.89 B	1.1	mg/kg	SW846 6010B
Aluminum	5320	21.3	mg/kg	SW846 6010B
Antimony	4.4 B	6.4	mg/kg	SW846 6010B
Barium	200 J	21.3	mg/kg	SW846 6010B
Beryllium	2.4	0.53	mg/kg	SW846 6010B
Cadmium	40.6	0.53	mg/kg	SW846 6010B
Calcium	94200 J	10600	mg/kg	SW846 6010B
Chromium	32.4 J	1.1	mg/kg	SW846 6010B
Cobalt	5.1 B	5.3	mg/kg	SW846 6010B
Copper	9100 J	53.2	mg/kg	SW846 6010B
Iron	17000	10.6	mg/kg	SW846 6010B
Magnesium	41200 J	532	mg/kg	SW846 6010B
Manganese	369 J	1.6	mg/kg	SW846 6010B
Nickel	91.2	4.3	mg/kg	SW846 6010B
Potassium	682 J	532	mg/kg	SW846 6010B
Silver	4.2	1.1	mg/kg	SW846 6010B
Sodium	3560	532	mg/kg	SW846 6010B
Vanadium	13.3 J	5.3	mg/kg	SW846 6010B
Zinc	29700	106	mg/kg	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A5F160286

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-061405-WP-005 06/14/05 12:35 005				
Percent Solids	94.0	10.0	%	MCAWW 160.3 MOD
S-061405-WP-006 06/14/05 12:45 006				
Mercury	1.6	0.11	mg/kg	SW846 7471A
Arsenic	21.1	2.2	mg/kg	SW846 6010B
Lead	9440	6.6	mg/kg	SW846 6010B
Selenium	7.9	1.1	mg/kg	SW846 6010B
Thallium	2.2	2.2	mg/kg	SW846 6010B
Aluminum	9640	22.1	mg/kg	SW846 6010B
Antimony	2.4 B,G	13.3	mg/kg	SW846 6010B
Barium	292 J	22.1	mg/kg	SW846 6010B
Beryllium	11.4	0.55	mg/kg	SW846 6010B
Cadmium	61.1	1.1	mg/kg	SW846 6010B
Calcium	42300 J	552	mg/kg	SW846 6010B
Chromium	119 J	2.2	mg/kg	SW846 6010B
Cobalt	22.6	5.5	mg/kg	SW846 6010B
Copper	17000 J	55.2	mg/kg	SW846 6010B
Iron	74900	22.1	mg/kg	SW846 6010B
Magnesium	17300 J	552	mg/kg	SW846 6010B
Manganese	1460 J	3.3	mg/kg	SW846 6010B
Nickel	476	4.4	mg/kg	SW846 6010B
Potassium	2090 J	552	mg/kg	SW846 6010B
Silver	8.1	1.1	mg/kg	SW846 6010B
Sodium	9740	552	mg/kg	SW846 6010B
Vanadium	24.1 J	11.0	mg/kg	SW846 6010B
Zinc	63000	221	mg/kg	SW846 6010B
Percent Solids	90.5	10.0	%	MCAWW 160.3 MOD
S-061405-WP-007 06/14/05 14:03 007				
Mercury	1.1	0.11	mg/kg	SW846 7471A
Arsenic	19.3	1.1	mg/kg	SW846 6010B
Lead	1520	0.34	mg/kg	SW846 6010B
Selenium	1.5	0.57	mg/kg	SW846 6010B
Thallium	1.3	1.1	mg/kg	SW846 6010B
Aluminum	5570	22.8	mg/kg	SW846 6010B
Antimony	2.9 B	6.8	mg/kg	SW846 6010B
Barium	404 J	22.8	mg/kg	SW846 6010B
Beryllium	1.0	0.57	mg/kg	SW846 6010B
Cadmium	4.0	0.57	mg/kg	SW846 6010B
Calcium	33200 J	570	mg/kg	SW846 6010B
Chromium	25.5 J	1.1	mg/kg	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A5F160286

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-061405-WP-007 06/14/05 14:03 007				
Cobalt	6.0	5.7	mg/kg	SW846 6010B
Copper	291 J	2.9	mg/kg	SW846 6010B
Iron	23500	11.4	mg/kg	SW846 6010B
Magnesium	17000 J	570	mg/kg	SW846 6010B
Manganese	413 J	1.7	mg/kg	SW846 6010B
Nickel	22.4	4.6	mg/kg	SW846 6010B
Potassium	885 J	570	mg/kg	SW846 6010B
Silver	0.61 B	1.1	mg/kg	SW846 6010B
Sodium	281 B	570	mg/kg	SW846 6010B
Vanadium	21.8 J	5.7	mg/kg	SW846 6010B
Zinc	1070	2.3	mg/kg	SW846 6010B
Percent Solids	87.7	10.0	%	MCAWW 160.3 MOD
S-061405-WP-008 06/14/05 14:18 008				
Mercury	0.087 B	0.13	mg/kg	SW846 7471A
Arsenic	8.7	1.3	mg/kg	SW846 6010B
Lead	61.1	0.39	mg/kg	SW846 6010B
Selenium	0.66	0.64	mg/kg	SW846 6010B
Thallium	1.0 B	1.3	mg/kg	SW846 6010B
Aluminum	13000	25.8	mg/kg	SW846 6010B
Antimony	0.49 B	7.7	mg/kg	SW846 6010B
Barium	134 J	25.8	mg/kg	SW846 6010B
Beryllium	0.81	0.64	mg/kg	SW846 6010B
Cadmium	0.58 B	0.64	mg/kg	SW846 6010B
Calcium	10500 J	644	mg/kg	SW846 6010B
Chromium	24.1 J	1.3	mg/kg	SW846 6010B
Cobalt	10.2	6.4	mg/kg	SW846 6010B
Copper	45.2 J	3.2	mg/kg	SW846 6010B
Iron	21900	12.9	mg/kg	SW846 6010B
Magnesium	5560 J	644	mg/kg	SW846 6010B
Manganese	609 J	1.9	mg/kg	SW846 6010B
Nickel	22.6	5.2	mg/kg	SW846 6010B
Potassium	2430 J	644	mg/kg	SW846 6010B
Sodium	351 B	644	mg/kg	SW846 6010B
Vanadium	26.7 J	6.4	mg/kg	SW846 6010B
Zinc	394	2.6	mg/kg	SW846 6010B
Percent Solids	77.6	10.0	%	MCAWW 160.3 MOD

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A5F160286

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-061405-WP-009 06/14/05 14:45 009				
Mercury	1.2	0.12	mg/kg	SW846 7471A
Arsenic	45.4	1.2	mg/kg	SW846 6010B
Lead	1700	1.7	mg/kg	SW846 6010B
Selenium	1.8	0.58	mg/kg	SW846 6010B
Thallium	1.5	1.2	mg/kg	SW846 6010B
Aluminum	6130	23.1	mg/kg	SW846 6010B
Antimony	3.1 B	6.9	mg/kg	SW846 6010B
Barium	565 J	23.1	mg/kg	SW846 6010B
Beryllium	1.3	0.58	mg/kg	SW846 6010B
Cadmium	6.3	0.58	mg/kg	SW846 6010B
Calcium	45500 J	578	mg/kg	SW846 6010B
Chromium	35.5 J	1.2	mg/kg	SW846 6010B
Cobalt	8.3	5.8	mg/kg	SW846 6010B
Copper	501 J	2.9	mg/kg	SW846 6010B
Iron	34600	11.6	mg/kg	SW846 6010B
Magnesium	17200 J	578	mg/kg	SW846 6010B
Manganese	596 J	1.7	mg/kg	SW846 6010B
Nickel	28.8	4.6	mg/kg	SW846 6010B
Potassium	1080 J	578	mg/kg	SW846 6010B
Silver	0.94 B	1.2	mg/kg	SW846 6010B
Sodium	374 B	578	mg/kg	SW846 6010B
Vanadium	26.9 J	5.8	mg/kg	SW846 6010B
Zinc	1910	11.6	mg/kg	SW846 6010B
Percent Solids	86.5	10.0	%	MCAWW 160.3 MOD
S-061405-WP-010 06/14/05 14:55 010				
Mercury	1.4	0.12	mg/kg	SW846 7471A
Arsenic	16.9	1.2	mg/kg	SW846 6010B
Lead	3030	1.7	mg/kg	SW846 6010B
Selenium	1.3	0.58	mg/kg	SW846 6010B
Thallium	0.69 B	1.2	mg/kg	SW846 6010B
Aluminum	4540	23.1	mg/kg	SW846 6010B
Antimony	5.5 B	6.9	mg/kg	SW846 6010B
Barium	477 J	23.1	mg/kg	SW846 6010B
Beryllium	0.82	0.58	mg/kg	SW846 6010B
Cadmium	4.7	0.58	mg/kg	SW846 6010B
Calcium	38500 J	577	mg/kg	SW846 6010B
Chromium	21.9 J	1.2	mg/kg	SW846 6010B
Cobalt	5.2 B	5.8	mg/kg	SW846 6010B
Copper	813 J	2.9	mg/kg	SW846 6010B
Iron	18600	11.5	mg/kg	SW846 6010B
Magnesium	18000 J	577	mg/kg	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A5F160286

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-061405-WP-010 06/14/05 14:55 010				
Manganese	384 J	1.7	mg/kg	SW846 6010B
Nickel	23.8	4.6	mg/kg	SW846 6010B
Potassium	934 J	577	mg/kg	SW846 6010B
Silver	1.2	1.2	mg/kg	SW846 6010B
Sodium	330 B	577	mg/kg	SW846 6010B
Vanadium	17.1 J	5.8	mg/kg	SW846 6010B
Zinc	2190	11.5	mg/kg	SW846 6010B
Percent Solids	86.7	10.0	%	MCAWW 160.3 MOD
S-061405-WP-011 06/14/05 15:10 011				
Mercury	0.69	0.12	mg/kg	SW846 7471A
Arsenic	14.4	1.2	mg/kg	SW846 6010B
Lead	997	1.8	mg/kg	SW846 6010B
Selenium	1.5	0.61	mg/kg	SW846 6010B
Aluminum	9660	24.4	mg/kg	SW846 6010B
Antimony	1.8 B	7.3	mg/kg	SW846 6010B
Barium	278 J	24.4	mg/kg	SW846 6010B
Beryllium	1.1	0.61	mg/kg	SW846 6010B
Cadmium	4.7	0.61	mg/kg	SW846 6010B
Calcium	32100 J	610	mg/kg	SW846 6010B
Chromium	37.2 J	1.2	mg/kg	SW846 6010B
Cobalt	7.2	6.1	mg/kg	SW846 6010B
Copper	723 J	3.0	mg/kg	SW846 6010B
Iron	19300	12.2	mg/kg	SW846 6010B
Magnesium	16100 J	610	mg/kg	SW846 6010B
Manganese	329 J	1.8	mg/kg	SW846 6010B
Nickel	40.5	4.9	mg/kg	SW846 6010B
Potassium	1550 J	610	mg/kg	SW846 6010B
Silver	0.92 B	1.2	mg/kg	SW846 6010B
Sodium	288 B	610	mg/kg	SW846 6010B
Vanadium	20.0 J	6.1	mg/kg	SW846 6010B
Zinc	1730	12.2	mg/kg	SW846 6010B
Percent Solids	82.0	10.0	%	MCAWW 160.3 MOD
S-061405-WP-012 06/14/05 15:25 012				
Mercury	0.48	0.12	mg/kg	SW846 7471A
Arsenic	7.0	1.2	mg/kg	SW846 6010B
Lead	718	1.8	mg/kg	SW846 6010B
Selenium	1.1	0.59	mg/kg	SW846 6010B
Aluminum	4480	23.5	mg/kg	SW846 6010B
Antimony	5.9 B	7.0	mg/kg	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A5F160286

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-061405-WP-012 06/14/05 15:25 012				
Barium	180 J	23.5	mg/kg	SW846 6010B
Beryllium	0.66	0.59	mg/kg	SW846 6010B
Cadmium	5.9	0.59	mg/kg	SW846 6010B
Calcium	103000 J	2930	mg/kg	SW846 6010B
Chromium	24.5 J	1.2	mg/kg	SW846 6010B
Cobalt	3.7 B	5.9	mg/kg	SW846 6010B
Copper	412 J	2.9	mg/kg	SW846 6010B
Iron	9840	11.7	mg/kg	SW846 6010B
Magnesium	22300 J	586	mg/kg	SW846 6010B
Manganese	241 J	1.8	mg/kg	SW846 6010B
Nickel	17.5	4.7	mg/kg	SW846 6010B
Potassium	950 J	586	mg/kg	SW846 6010B
Sodium	695	586	mg/kg	SW846 6010B
Vanadium	13.9 J	5.9	mg/kg	SW846 6010B
Zinc	2260	11.7	mg/kg	SW846 6010B
Percent Solids	85.3	10.0	%	MCAWW 160.3 MOD
S-061405-WP-013 06/14/05 16:00 013				
Mercury	1.3	0.14	mg/kg	SW846 7471A
Arsenic	22.6	1.4	mg/kg	SW846 6010B
Lead	1710	2.0	mg/kg	SW846 6010B
Selenium	2.1	0.68	mg/kg	SW846 6010B
Thallium	1.4	1.4	mg/kg	SW846 6010B
Aluminum	8470	27.1	mg/kg	SW846 6010B
Antimony	2.8 B	8.1	mg/kg	SW846 6010B
Barium	634 J	27.1	mg/kg	SW846 6010B
Beryllium	1.5	0.68	mg/kg	SW846 6010B
Cadmium	10.2	0.68	mg/kg	SW846 6010B
Calcium	24800 J	676	mg/kg	SW846 6010B
Chromium	45.1 J	1.4	mg/kg	SW846 6010B
Cobalt	8.2	6.8	mg/kg	SW846 6010B
Copper	571 J	3.4	mg/kg	SW846 6010B
Iron	25500	13.5	mg/kg	SW846 6010B
Magnesium	9680 J	676	mg/kg	SW846 6010B
Manganese	444 J	2.0	mg/kg	SW846 6010B
Nickel	35.2	5.4	mg/kg	SW846 6010B
Potassium	1420 J	676	mg/kg	SW846 6010B
Silver	1.1 B	1.4	mg/kg	SW846 6010B
Sodium	660 B	676	mg/kg	SW846 6010B
Vanadium	28.8 J	6.8	mg/kg	SW846 6010B
Zinc	2960	13.5	mg/kg	SW846 6010B
Percent Solids	73.9	10.0	%	MCAWW 160.3 MOD

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EXECUTIVE SUMMARY - Detection Highlights

A5F160286

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-061405-WP-014 06/14/05 16:15 014				
Mercury	0.65	0.13	mg/kg	SW846 7471A
Arsenic	10.8	1.3	mg/kg	SW846 6010B
Lead	1660	1.9	mg/kg	SW846 6010B
Selenium	1.6	0.64	mg/kg	SW846 6010B
Thallium	0.76 B	1.3	mg/kg	SW846 6010B
Aluminum	4680	25.5	mg/kg	SW846 6010B
Antimony	2.6 B	7.7	mg/kg	SW846 6010B
Barium	600 J	25.5	mg/kg	SW846 6010B
Beryllium	0.72	0.64	mg/kg	SW846 6010B
Cadmium	7.8	0.64	mg/kg	SW846 6010B
Calcium	40900 J	639	mg/kg	SW846 6010B
Chromium	30.6 J	1.3	mg/kg	SW846 6010B
Cobalt	5.6 B	6.4	mg/kg	SW846 6010B
Copper	314 J	3.2	mg/kg	SW846 6010B
Iron	22900	12.8	mg/kg	SW846 6010B
Magnesium	11800 J	639	mg/kg	SW846 6010B
Manganese	310 J	1.9	mg/kg	SW846 6010B
Nickel	27.7	5.1	mg/kg	SW846 6010B
Potassium	959 J	639	mg/kg	SW846 6010B
Silver	1.0 B	1.3	mg/kg	SW846 6010B
Sodium	388 B	639	mg/kg	SW846 6010B
Vanadium	17.1 J	6.4	mg/kg	SW846 6010B
Zinc	2480	12.8	mg/kg	SW846 6010B
Percent Solids	78.3	10.0	%	MCAWW 160.3 MOD
S-061405-WP-015 06/14/05 16:35 015				
Mercury	1.4	0.10	mg/kg	SW846 7471A
Arsenic	6.4	1.0	mg/kg	SW846 6010B
Lead	1490	1.5	mg/kg	SW846 6010B
Selenium	1.3	0.51	mg/kg	SW846 6010B
Thallium	0.57 B	1.0	mg/kg	SW846 6010B
Aluminum	3770	20.6	mg/kg	SW846 6010B
Antimony	2.2 B	6.2	mg/kg	SW846 6010B
Barium	216 J	20.6	mg/kg	SW846 6010B
Beryllium	0.61	0.51	mg/kg	SW846 6010B
Cadmium	6.8	0.51	mg/kg	SW846 6010B
Calcium	44400 J	515	mg/kg	SW846 6010B
Chromium	30.5 J	1.0	mg/kg	SW846 6010B
Cobalt	3.9 B	5.1	mg/kg	SW846 6010B
Copper	846 J	2.6	mg/kg	SW846 6010B
Iron	15900	10.3	mg/kg	SW846 6010B
Magnesium	23100 J	515	mg/kg	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

A5F160286

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-061405-WP-015 06/14/05 16:35 015				
Manganese	303 J	1.5	mg/kg	SW846 6010B
Nickel	34.2	4.1	mg/kg	SW846 6010B
Potassium	482 B,J	515	mg/kg	SW846 6010B
Silver	1.0	1.0	mg/kg	SW846 6010B
Sodium	617	515	mg/kg	SW846 6010B
Vanadium	14.8 J	5.1	mg/kg	SW846 6010B
Zinc	2960	10.3	mg/kg	SW846 6010B
Percent Solids	97.1	10.0	%	MCAWW 160.3 MOD
S-061405-WP-016 06/14/05 16:50 016				
Mercury	0.72	0.11	mg/kg	SW846 7471A
Arsenic	10.0	1.1	mg/kg	SW846 6010B
Lead	2020	6.4	mg/kg	SW846 6010B
Selenium	11.8	0.53	mg/kg	SW846 6010B
Thallium	0.65 B	1.1	mg/kg	SW846 6010B
Aluminum	3570	21.3	mg/kg	SW846 6010B
Antimony	6.0 B	6.4	mg/kg	SW846 6010B
Barium	166 J	21.3	mg/kg	SW846 6010B
Beryllium	2.8	0.53	mg/kg	SW846 6010B
Cadmium	18.5	0.53	mg/kg	SW846 6010B
Calcium	48800 J	534	mg/kg	SW846 6010B
Chromium	57.3 J	1.1	mg/kg	SW846 6010B
Cobalt	3.7 B	5.3	mg/kg	SW846 6010B
Copper	7340 J	53.4	mg/kg	SW846 6010B
Iron	17500	10.7	mg/kg	SW846 6010B
Magnesium	24300 J	534	mg/kg	SW846 6010B
Manganese	380 J	1.6	mg/kg	SW846 6010B
Nickel	149	4.3	mg/kg	SW846 6010B
Potassium	470 B,J	534	mg/kg	SW846 6010B
Silver	2.6	1.1	mg/kg	SW846 6010B
Sodium	1470	534	mg/kg	SW846 6010B
Vanadium	11.6 J	5.3	mg/kg	SW846 6010B
Zinc	11500	42.7	mg/kg	SW846 6010B
Percent Solids	93.7	10.0	%	MCAWW 160.3 MOD

ANALYTICAL METHODS SUMMARY

A5F160286

PARAMETER	ANALYTICAL METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A
Total Residue as Percent Solids	MCAWW 160.3 MOD
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A5F160286

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
HDQ66	001	S-061405-WP-001	06/14/05	11:50
HDQ7Q	002	S-061405-WP-002	06/14/05	12:00
HDQ7T	003	S-061405-WP-003	06/14/05	12:10
HDQ7V	004	S-061405-WP-004	06/14/05	12:20
HDQ7W	005	S-061405-WP-005	06/14/05	12:35
HDQ7X	006	S-061405-WP-006	06/14/05	12:45
HDQ70	007	S-061405-WP-007	06/14/05	14:03
HDQ71	008	S-061405-WP-008	06/14/05	14:18
HDQ72	009	S-061405-WP-009	06/14/05	14:45
HDQ73	010	S-061405-WP-010	06/14/05	14:55
HDQ75	011	S-061405-WP-011	06/14/05	15:10
HDQ76	012	S-061405-WP-012	06/14/05	15:25
HDQ79	013	S-061405-WP-013	06/14/05	16:00
HDQ8C	014	S-061405-WP-014	06/14/05	16:15
HDQ8D	015	S-061405-WP-015	06/14/05	16:35
HDQ8E	016	S-061405-WP-016	06/14/05	16:50

NOTE(S):

he analytical results of the samples listed above are presented on the following pages.

ll calculations are performed before rounding to avoid round-off errors in calculated results.

- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-001

TOTAL Metals

Lot-Sample #...: A5F160286-001 Matrix.....: SO
Date Sampled...: 06/14/05 11:50 Date Received..: 06/16/05
% Moisture.....: 9.7

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5168039						
Aluminum	6430	22.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ661AA
		Dilution Factor: 1				
Arsenic	21.1	1.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ661AW
		Dilution Factor: 1				
Lead	3870	3.3	mg/kg	SW846 6010B	06/17-06/23/05	HDQ661AX
		Dilution Factor: 10				
Antimony	14.9	6.6	mg/kg	SW846 6010B	06/17-06/22/05	HDQ661AC
		Dilution Factor: 1				
Barium	1550 J	22.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ661AD
		Dilution Factor: 1				
Selenium	2.3	0.55	mg/kg	SW846 6010B	06/17-06/22/05	HDQ661A0
		Dilution Factor: 1				
Beryllium	2.2	0.55	mg/kg	SW846 6010B	06/17-06/22/05	HDQ661AE
		Dilution Factor: 1				
Thallium	1.3	1.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ661AJ
		Dilution Factor: 1				
Cadmium	29.5	0.55	mg/kg	SW846 6010B	06/17-06/22/05	HDQ661AF
		Dilution Factor: 1				
Calcium	51000 J	553	mg/kg	SW846 6010B	06/17-06/22/05	HDQ661AG
		Dilution Factor: 1				
Chromium	47.5 J	1.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ661AH
		Dilution Factor: 1				
Cobalt	7.9	5.5	mg/kg	SW846 6010B	06/17-06/22/05	HDQ661AJ
		Dilution Factor: 1				
Copper	4390 J	2.8	mg/kg	SW846 6010B	06/17-06/22/05	HDQ661AK
		Dilution Factor: 1				
Iron	35700	11.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ661.
		Dilution Factor: 1				

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-001

TOTAL Metals

Lot-Sample #...: A5F160286-001 Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium	16200 J	553	mg/kg	SW846 6010B	06/17-06/22/05	HDQ661AM
		Dilution Factor: 1				
Manganese	942 J	1.7	mg/kg	SW846 6010B	06/17-06/22/05	HDQ661AN
		Dilution Factor: 1				
Nickel	83.8	4.4	mg/kg	SW846 6010B	06/17-06/22/05	HDQ661AP
		Dilution Factor: 1				
Potassium	1040 J	553	mg/kg	SW846 6010B	06/17-06/22/05	HDQ661AQ
		Dilution Factor: 1				
Silver	3.0	1.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ661AR
		Dilution Factor: 1				
Sodium	1710	553	mg/kg	SW846 6010B	06/17-06/22/05	HDQ661AT
		Dilution Factor: 1				
Vanadium	24.1 J	5.5	mg/kg	SW846 6010B	06/17-06/22/05	HDQ661AU
		Dilution Factor: 1				
Zinc	15000	111	mg/kg	SW846 6010B	06/17-06/23/05	HDQ661AV
		Dilution Factor: 50				
Mercury	1.2	0.11	mg/kg	SW846 7471A	06/17-06/20/05	HDQ661A2
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-001

General Chemistry

Lot-Sample #...: A5F160286-001 Work Order #...: HDQ66 Matrix.....: SO
Date Sampled...: 06/14/05 11:50 Date Received..: 06/16/05
% Moisture.....: 9.7

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	90.3	10.0	%	MCAWW 160.3 MOD	06/17-06/20/05	5168329

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-002

TOTAL Metals

Lot-Sample #...: A5F160286-002 Matrix.....: SO
Date Sampled...: 06/14/05 12:00 Date Received..: 06/16/05
% Moisture.....: 2.4

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5168039						
Aluminum	1770	20.5	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7Q1AF
		Dilution Factor: 1				
Arsenic	3.2	1.0	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7Q1A2
		Dilution Factor: 1				
Lead	1250	1.5	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7Q1A3
		Dilution Factor: 5				
Antimony	1.5 B	6.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7Q1AG
		Dilution Factor: 1				
Barium	78.1 J	20.5	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7Q1AH
		Dilution Factor: 1				
Selenium	1.7	0.51	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7Q1AA
		Dilution Factor: 1				
Beryllium	0.74	0.51	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7Q1AJ
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7Q1AC
		Dilution Factor: 1				
Cadmium	16.1	0.51	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7Q1AK
		Dilution Factor: 1				
Calcium	144000 J	2560	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7Q1AL
		Dilution Factor: 5				
Chromium	15.5 J	1.0	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7Q1AM
		Dilution Factor: 1				
Cobalt	2.1 B	5.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7Q1AN
		Dilution Factor: 1				
Copper	1810 J	2.6	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7Q1AP
		Dilution Factor: 1				
Iron	6090	10.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7Q1AQ
		Dilution Factor: 1				

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-002

TOTAL Metals

Lot-Sample #...: A5F160286-002 Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium	83400 J	2560	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7Q1AR
		Dilution Factor: 5				
Manganese	239 J	1.5	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7Q1AT
		Dilution Factor: 1				
Nickel	30.5	4.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7Q1AU
		Dilution Factor: 1				
Potassium	555 J	512	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7Q1AV
		Dilution Factor: 1				
Silver	1.4	1.0	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7Q1AW
		Dilution Factor: 1				
Sodium	1200	512	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7Q1AX
		Dilution Factor: 1				
Vanadium	6.4 J	5.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7Q1A0
		Dilution Factor: 1				
Zinc	10400	102	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7Q1A1
		Dilution Factor: 50				
Mercury	0.19	0.10	mg/kg	SW846 7471A	06/17-06/20/05	HDQ7Q1AD
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-002

General Chemistry

Lot-Sample #...: A5F160286-002 Work Order #...: HDQ7Q Matrix.....: SO
Date Sampled...: 06/14/05 12:00 Date Received..: 06/16/05
% Moisture.....: 2.4

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	97.6	10.0	%	MCAWW 160.3 MOD	06/17-06/20/05	5168329

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-003

TOTAL Metals

Lot-Sample #...: A5F160286-003 Matrix.....: SO
Date Sampled...: 06/14/05 12:10 Date Received..: 06/16/05
% Moisture.....: 10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5168039						
Aluminum	2000	22.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7T1AF
		Dilution Factor: 1				
Arsenic	33.2	1.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7T1A2
		Dilution Factor: 1				
Lead	52400	66.7	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7T1A3
		Dilution Factor: 200				
Antimony	ND	6.7	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7T1AG
		Dilution Factor: 1				
Barium	230 J	22.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7T1AH
		Dilution Factor: 1				
Selenium	7.7	0.56	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7T1AA
		Dilution Factor: 1				
Beryllium	2.9	0.56	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7T1AJ
		Dilution Factor: 1				
Thallium	1.5	1.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7T1AC
		Dilution Factor: 1				
Cadmium	234	0.56	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7T1AK
		Dilution Factor: 1				
Calcium	27800 J	556	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7T1AL
		Dilution Factor: 1				
Chromium	24.3 J	1.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7T1AM
		Dilution Factor: 1				
Cobalt	2.6 B	5.6	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7T1AN
		Dilution Factor: 1				
Copper	8220 J	55.6	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7T1AP
		Dilution Factor: 20				
Iron	7630	11.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7T1A
		Dilution Factor: 1				

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-003

TOTAL Metals

Lot-Sample #...: A5F160286-003 Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium	11700 J	556	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7T1AR
		Dilution Factor: 1				
Manganese	212 J	1.7	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7T1AT
		Dilution Factor: 1				
Nickel	69.7	4.4	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7T1AU
		Dilution Factor: 1				
Potassium	280 B,J	556	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7T1AV
		Dilution Factor: 1				
Silver	28.8	1.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7T1AW
		Dilution Factor: 1				
Sodium	31000	556	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7T1AX
		Dilution Factor: 1				
Vanadium	6.8 J	5.6	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7T1A0
		Dilution Factor: 1				
Zinc	342000	2220	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7T1A1
		Dilution Factor: 1000				
Mercury	0.42	0.11	mg/kg	SW846 7471A	06/17-06/20/05	HDQ7T1AD
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-003

General Chemistry

Lot-Sample #...: A5F160286-003 Work Order #...: HDQ7T Matrix.....: SO
Date Sampled...: 06/14/05 12:10 Date Received..: 06/16/05
% Moisture.....: 10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	90.0	10.0	%	MCAWW 160.3 MOD	06/17-06/20/05	5168329

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-004

TOTAL Metals

Lot-Sample #...: A5F160286-004 Matrix.....: SO
Date Sampled...: 06/14/05 12:20 Date Received..: 06/16/05
% Moisture.....: 17

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5168039						
Aluminum	3500	24.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7V1AF
		Dilution Factor: 1				
Arsenic	11.2	1.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7V1A2
		Dilution Factor: 1				
Lead	8790	7.2	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7V1A3
		Dilution Factor: 20				
Antimony	3.8 B	7.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7V1AG
		Dilution Factor: 1				
Barium	248 J	24.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7V1AH
		Dilution Factor: 1				
Selenium	3.0	0.60	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7V1AA
		Dilution Factor: 1				
Beryllium	6.1	0.60	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7V1AJ
		Dilution Factor: 1				
Thallium	1.1 B	1.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7V1AC
		Dilution Factor: 1				
Cadmium	76.1	0.60	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7V1AK
		Dilution Factor: 1				
Calcium	43800 J	601	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7V1AL
		Dilution Factor: 1				
Chromium	52.9 J	1.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7V1AM
		Dilution Factor: 1				
Cobalt	6.2	6.0	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7V1AN
		Dilution Factor: 1				
Copper	11600 J	60.1	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7V1AP
		Dilution Factor: 20				
Iron	34100	12.0	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7V1AQ
		Dilution Factor: 1				

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-004

TOTAL Metals

Lot-Sample #...: A5F160286-004 Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium	14400 J	601	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7V1AR
		Dilution Factor: 1				
Manganese	665 J	1.8	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7V1AT
		Dilution Factor: 1				
Nickel	188	4.8	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7V1AU
		Dilution Factor: 1				
Potassium	537 B,J	601	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7V1AV
		Dilution Factor: 1				
Silver	6.4	1.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7V1AW
		Dilution Factor: 1				
Sodium	7000	601	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7V1A
		Dilution Factor: 1				
Vanadium	12.7 J	6.0	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7V1A0
		Dilution Factor: 1				
Zinc	64300	241	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7V1A1
		Dilution Factor: 100				
Mercury	0.65	0.12	mg/kg	SW846 7471A	06/17-06/20/05	HDQ7V1AD
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-004

General Chemistry

Lot-Sample #...: A5F160286-004 Work Order #...: HDQ7V Matrix.....: SO
Date Sampled...: 06/14/05 12:20 Date Received..: 06/16/05
% Moisture.....: 17

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	83.2	10.0	%	MCAWW 160.3 MOD	06/17-06/20/05	5168329

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-005

TOTAL Metals

Lot-Sample #...: A5F160286-005 Matrix.....: SO
Date Sampled...: 06/14/05 12:35 Date Received..: 06/16/05
% Moisture.....: 6.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5168039						
Aluminum	5320	21.3	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7W1AF
		Dilution Factor: 1				
Arsenic	9.1	1.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7W1A2
		Dilution Factor: 1				
Lead	5150	6.4	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7W1A3
		Dilution Factor: 20				
Antimony	4.4 B	6.4	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7W1AG
		Dilution Factor: 1				
Barium	200 J	21.3	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7W1AH
		Dilution Factor: 1				
Selenium	2.2	0.53	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7W1AA
		Dilution Factor: 1				
Beryllium	2.4	0.53	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7W1AJ
		Dilution Factor: 1				
Thallium	0.89 B	1.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7W1AC
		Dilution Factor: 1				
Cadmium	40.6	0.53	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7W1AK
		Dilution Factor: 1				
Calcium	94200 J	10600	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7W1AL
		Dilution Factor: 20				
Chromium	32.4 J	1.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7W1AM
		Dilution Factor: 1				
Cobalt	5.1 B	5.3	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7W1AN
		Dilution Factor: 1				
Copper	9100 J	53.2	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7W1AP
		Dilution Factor: 20				
Iron	17000	10.6	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7W1A
		Dilution Factor: 1				

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-005

TOTAL Metals

Lot-Sample #...: A5F160286-005 Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium	41200 J	532	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7W1AR
		Dilution Factor: 1				
Manganese	369 J	1.6	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7W1AT
		Dilution Factor: 1				
Nickel	91.2	4.3	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7W1AU
		Dilution Factor: 1				
Potassium	682 J	532	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7W1AV
		Dilution Factor: 1				
Silver	4.2	1.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7W1AW
		Dilution Factor: 1				
Sodium	3560	532	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7W1AX
		Dilution Factor: 1				
Vanadium	13.3 J	5.3	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7W1A0
		Dilution Factor: 1				
Zinc	29700	106	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7W1A1
		Dilution Factor: 50				
Mercury	0.33	0.11	mg/kg	SW846 7471A	06/17-06/20/05	HDQ7W1AD
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-005

General Chemistry

Lot-Sample #...: A5F160286-005 Work Order #...: HDQ7W Matrix.....: SO
Date Sampled...: 06/14/05 12:35 Date Received..: 06/16/05
% Moisture.....: 6.0

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	94.0	10.0	%	MCAWW 160.3 MOD	06/17-06/20/05	5168329

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-006

TOTAL Metals

Lot-Sample #...: A5F160286-006 Matrix.....: SO
Date Sampled...: 06/14/05 12:45 Date Received..: 06/16/05
% Moisture.....: 9.5

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5168039						
Aluminum	9640	22.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7X1AF
		Dilution Factor: 1				
Arsenic	21.1	2.2	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7X1A2
		Dilution Factor: 2				
Lead	9440	6.6	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7X1A3
		Dilution Factor: 20				
Antimony	2.4 B,G	13.3	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7X1AG
		Dilution Factor: 2				
Barium	292 J	22.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7X1AH
		Dilution Factor: 1				
Selenium	7.9	1.1	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7X1AA
		Dilution Factor: 2				
Beryllium	11.4	0.55	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7X1AJ
		Dilution Factor: 1				
Thallium	2.2	2.2	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7X1AC
		Dilution Factor: 2				
Cadmium	61.1	1.1	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7X1AK
		Dilution Factor: 2				
Calcium	42300 J	552	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7X1AL
		Dilution Factor: 1				
Chromium	119 J	2.2	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7X1AM
		Dilution Factor: 2				
Cobalt	22.6	5.5	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7X1AN
		Dilution Factor: 1				
Copper	17000 J	55.2	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7X1AP
		Dilution Factor: 20				
- on	74900	22.1	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7X1AQ
		Dilution Factor: 2				

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-006

TOTAL Metals

Lot-Sample #...: A5F160286-006 Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium	17300 J	552	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7X1AR
		Dilution Factor: 1				
Manganese	1460 J	3.3	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7X1AT
		Dilution Factor: 2				
Nickel	476	4.4	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7X1AU
		Dilution Factor: 1				
Potassium	2090 J	552	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7X1AV
		Dilution Factor: 1				
Silver	8.1	1.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7X1AW
		Dilution Factor: 1				
Sodium	9740	552	mg/kg	SW846 6010B	06/17-06/22/05	HDQ7X1AX
		Dilution Factor: 1				
Vanadium	24.1 J	11.0	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7X1A0
		Dilution Factor: 2				
Zinc	63000	221	mg/kg	SW846 6010B	06/17-06/23/05	HDQ7X1A1
		Dilution Factor: 100				
Mercury	1.6	0.11	mg/kg	SW846 7471A	06/17-06/20/05	HDQ7X1AD
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-006

General Chemistry

Lot-Sample #...: A5F160286-006 Work Order #...: HDQ7X Matrix.....: SO
Date Sampled...: 06/14/05 12:45 Date Received..: 06/16/05
% Moisture.....: 9.5

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	90.5	10.0	%	MCAWW 160.3 MOD	06/17-06/20/05	5168329

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-007

TOTAL Metals

Lot-Sample #...: A5F160286-007 Matrix.....: SO
Date Sampled...: 06/14/05 14:03 Date Received..: 06/16/05
% Moisture.....: 12

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5168039						
Aluminum	5570	22.8	mg/kg	SW846 6010B	06/17-06/22/05	HDQ701AF
		Dilution Factor: 1				
Arsenic	19.3	1.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ701A2
		Dilution Factor: 1				
Lead	1520	0.34	mg/kg	SW846 6010B	06/17-06/23/05	HDQ701A3
		Dilution Factor: 1				
Antimony	2.9 B	6.8	mg/kg	SW846 6010B	06/17-06/22/05	HDQ701AG
		Dilution Factor: 1				
Barium	404 J	22.8	mg/kg	SW846 6010B	06/17-06/22/05	HDQ701AH
		Dilution Factor: 1				
Selenium	1.5	0.57	mg/kg	SW846 6010B	06/17-06/22/05	HDQ701AA
		Dilution Factor: 1				
Beryllium	1.0	0.57	mg/kg	SW846 6010B	06/17-06/22/05	HDQ701AJ
		Dilution Factor: 1				
Thallium	1.3	1.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ701AC
		Dilution Factor: 1				
Cadmium	4.0	0.57	mg/kg	SW846 6010B	06/17-06/22/05	HDQ701AK
		Dilution Factor: 1				
Calcium	33200 J	570	mg/kg	SW846 6010B	06/17-06/22/05	HDQ701AL
		Dilution Factor: 1				
Chromium	25.5 J	1.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ701AM
		Dilution Factor: 1				
Cobalt	6.0	5.7	mg/kg	SW846 6010B	06/17-06/22/05	HDQ701AN
		Dilution Factor: 1				
Copper	291 J	2.9	mg/kg	SW846 6010B	06/17-06/22/05	HDQ701AP
		Dilution Factor: 1				
Iron	23500	11.4	mg/kg	SW846 6010B	06/17-06/22/05	HDQ701A
		Dilution Factor: 1				

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-007

TOTAL Metals

Lot-Sample #...: A5F160286-007 Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium	17000 J	570	mg/kg	SW846 6010B	06/17-06/22/05	HDQ701AR
		Dilution Factor: 1				
Manganese	413 J	1.7	mg/kg	SW846 6010B	06/17-06/22/05	HDQ701AT
		Dilution Factor: 1				
Nickel	22.4	4.6	mg/kg	SW846 6010B	06/17-06/22/05	HDQ701AU
		Dilution Factor: 1				
Potassium	885 J	570	mg/kg	SW846 6010B	06/17-06/22/05	HDQ701AV
		Dilution Factor: 1				
Silver	0.61 B	1.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ701AW
		Dilution Factor: 1				
Sodium	281 B	570	mg/kg	SW846 6010B	06/17-06/22/05	HDQ701AX
		Dilution Factor: 1				
Vanadium	21.8 J	5.7	mg/kg	SW846 6010B	06/17-06/22/05	HDQ701A0
		Dilution Factor: 1				
Zinc	1070	2.3	mg/kg	SW846 6010B	06/17-06/23/05	HDQ701A1
		Dilution Factor: 1				
Mercury	1.1	0.11	mg/kg	SW846 7471A	06/17-06/20/05	HDQ701AD
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-007

General Chemistry

Lot-Sample #...: A5F160286-007 Work Order #...: HDQ70 Matrix.....: SO
Date Sampled...: 06/14/05 14:03 Date Received..: 06/16/05
% Moisture.....: 12

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	87.7	10.0	%	MCAWW 160.3 MOD	06/17-06/20/05	5168329

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-008

TOTAL Metals

Lot-Sample #...: A5F160286-008 Matrix.....: SO
Date Sampled...: 06/14/05 14:18 Date Received..: 06/16/05
% Moisture.....: 22

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5168039						
Aluminum	13000	25.8	mg/kg	SW846 6010B	06/17-06/22/05	HDQ711AF
		Dilution Factor: 1				
Arsenic	8.7	1.3	mg/kg	SW846 6010B	06/17-06/22/05	HDQ711A2
		Dilution Factor: 1				
Lead	61.1	0.39	mg/kg	SW846 6010B	06/17-06/23/05	HDQ711A3
		Dilution Factor: 1				
Antimony	0.49 B	7.7	mg/kg	SW846 6010B	06/17-06/22/05	HDQ711AG
		Dilution Factor: 1				
Barium	134 J	25.8	mg/kg	SW846 6010B	06/17-06/22/05	HDQ711AH
		Dilution Factor: 1				
Selenium	0.66	0.64	mg/kg	SW846 6010B	06/17-06/22/05	HDQ711AA
		Dilution Factor: 1				
Beryllium	0.81	0.64	mg/kg	SW846 6010B	06/17-06/22/05	HDQ711AJ
		Dilution Factor: 1				
Thallium	1.0 B	1.3	mg/kg	SW846 6010B	06/17-06/22/05	HDQ711AC
		Dilution Factor: 1				
Cadmium	0.58 B	0.64	mg/kg	SW846 6010B	06/17-06/22/05	HDQ711AK
		Dilution Factor: 1				
Calcium	10500 J	644	mg/kg	SW846 6010B	06/17-06/22/05	HDQ711AL
		Dilution Factor: 1				
Chromium	24.1 J	1.3	mg/kg	SW846 6010B	06/17-06/22/05	HDQ711AM
		Dilution Factor: 1				
Cobalt	10.2	6.4	mg/kg	SW846 6010B	06/17-06/22/05	HDQ711AN
		Dilution Factor: 1				
Copper	45.2 J	3.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ711AP
		Dilution Factor: 1				
on	21900	12.9	mg/kg	SW846 6010B	06/17-06/22/05	HDQ711AQ
		Dilution Factor: 1				

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-008

TOTAL Metals

Lot-Sample #...: A5F160286-008 Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium	5560 J	644	mg/kg	SW846 6010B	06/17-06/22/05	HDQ711AR
		Dilution Factor: 1				
Manganese	609 J	1.9	mg/kg	SW846 6010B	06/17-06/22/05	HDQ711AT
		Dilution Factor: 1				
Nickel	22.6	5.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ711AU
		Dilution Factor: 1				
Potassium	2430 J	644	mg/kg	SW846 6010B	06/17-06/22/05	HDQ711AV
		Dilution Factor: 1				
Silver	ND	1.3	mg/kg	SW846 6010B	06/17-06/22/05	HDQ711AW
		Dilution Factor: 1				
Sodium	351 B	644	mg/kg	SW846 6010B	06/17-06/22/05	HDQ711AX
		Dilution Factor: 1				
Vanadium	26.7 J	6.4	mg/kg	SW846 6010B	06/17-06/22/05	HDQ711A0
		Dilution Factor: 1				
Zinc	394	2.6	mg/kg	SW846 6010B	06/17-06/23/05	HDQ711A1
		Dilution Factor: 1				
Mercury	0.087 B	0.13	mg/kg	SW846 7471A	06/17-06/20/05	HDQ711AD
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-008

General Chemistry

Lot-Sample #...: A5F160286-008 Work Order #...: HDQ71 Matrix.....: SO
Date Sampled...: 06/14/05 14:18 Date Received..: 06/16/05
% Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	77.6	10.0	%	MCAWW 160.3 MOD	06/17-06/20/05	5168329

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-009

TOTAL Metals

Lot-Sample #...: A5F160286-009 Matrix.....: SO
Date Sampled...: 06/14/05 14:45 Date Received..: 06/16/05
% Moisture.....: 14

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5I68039						
Aluminum	6130	23.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ721AF
		Dilution Factor: 1				
Arsenic	45.4	1.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ721A2
		Dilution Factor: 1				
Lead	1700	1.7	mg/kg	SW846 6010B	06/17-06/23/05	HDQ721A3
		Dilution Factor: 5				
Antimony	3.1 B	6.9	mg/kg	SW846 6010B	06/17-06/22/05	HDQ721AG
		Dilution Factor: 1				
Barium	565 J	23.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ721AH
		Dilution Factor: 1				
Selenium	1.8	0.58	mg/kg	SW846 6010B	06/17-06/22/05	HDQ721AA
		Dilution Factor: 1				
Beryllium	1.3	0.58	mg/kg	SW846 6010B	06/17-06/22/05	HDQ721AJ
		Dilution Factor: 1				
Thallium	1.5	1.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ721AC
		Dilution Factor: 1				
Cadmium	6.3	0.58	mg/kg	SW846 6010B	06/17-06/22/05	HDQ721AK
		Dilution Factor: 1				
Calcium	45500 J	578	mg/kg	SW846 6010B	06/17-06/22/05	HDQ721AL
		Dilution Factor: 1				
Chromium	35.5 J	1.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ721AM
		Dilution Factor: 1				
Cobalt	8.3	5.8	mg/kg	SW846 6010B	06/17-06/22/05	HDQ721AN
		Dilution Factor: 1				
Copper	501 J	2.9	mg/kg	SW846 6010B	06/17-06/22/05	HDQ721AP
		Dilution Factor: 1				
Iron	34600	11.6	mg/kg	SW846 6010B	06/17-06/22/05	HDQ721J
		Dilution Factor: 1				

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-009

TOTAL Metals

Lot-Sample #...: A5F160286-009 Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium	17200 J	578	mg/kg	SW846 6010B	06/17-06/22/05	HDQ721AR
		Dilution Factor: 1				
Manganese	596 J	1.7	mg/kg	SW846 6010B	06/17-06/22/05	HDQ721AT
		Dilution Factor: 1				
Nickel	28.8	4.6	mg/kg	SW846 6010B	06/17-06/22/05	HDQ721AU
		Dilution Factor: 1				
Potassium	1080 J	578	mg/kg	SW846 6010B	06/17-06/22/05	HDQ721AV
		Dilution Factor: 1				
Silver	0.94 B	1.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ721AW
		Dilution Factor: 1				
Sodium	374 B	578	mg/kg	SW846 6010B	06/17-06/22/05	HDQ721AX
		Dilution Factor: 1				
Vanadium	26.9 J	5.8	mg/kg	SW846 6010B	06/17-06/22/05	HDQ721A0
		Dilution Factor: 1				
Zinc	1910	11.6	mg/kg	SW846 6010B	06/17-06/23/05	HDQ721A1
		Dilution Factor: 5				
Mercury	1.2	0.12	mg/kg	SW846 7471A	06/17-06/20/05	HDQ721AD
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-009

General Chemistry

Lot-Sample #...: A5F160286-009 Work Order #...: HDQ72 Matrix.....: SO
Date Sampled...: 06/14/05 14:45 Date Received..: 06/16/05
% Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	86.5	10.0	%	MCAWW 160.3 MOD	06/17-06/20/05	5168329

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-010

TOTAL Metals

Lot-Sample #...: A5F160286-010 Matrix.....: SO
Date Sampled...: 06/14/05 14:55 Date Received..: 06/16/05
% Moisture.....: 13

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5168039						
Aluminum	4540	23.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ731AF
		Dilution Factor: 1				
Arsenic	16.9	1.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ731A2
		Dilution Factor: 1				
Lead	3030	1.7	mg/kg	SW846 6010B	06/17-06/23/05	HDQ731A3
		Dilution Factor: 5				
Antimony	5.5 B	6.9	mg/kg	SW846 6010B	06/17-06/22/05	HDQ731AG
		Dilution Factor: 1				
Barium	477 J	23.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ731AH
		Dilution Factor: 1				
Selenium	1.3	0.58	mg/kg	SW846 6010B	06/17-06/22/05	HDQ731AA
		Dilution Factor: 1				
Beryllium	0.82	0.58	mg/kg	SW846 6010B	06/17-06/22/05	HDQ731AJ
		Dilution Factor: 1				
Thallium	0.69 B	1.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ731AC
		Dilution Factor: 1				
Cadmium	4.7	0.58	mg/kg	SW846 6010B	06/17-06/22/05	HDQ731AK
		Dilution Factor: 1				
Calcium	38500 J	577	mg/kg	SW846 6010B	06/17-06/22/05	HDQ731AL
		Dilution Factor: 1				
Chromium	21.9 J	1.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ731AM
		Dilution Factor: 1				
Cobalt	5.2 B	5.8	mg/kg	SW846 6010B	06/17-06/22/05	HDQ731AN
		Dilution Factor: 1				
Copper	813 J	2.9	mg/kg	SW846 6010B	06/17-06/22/05	HDQ731AP
		Dilution Factor: 1				
Iron	18600	11.5	mg/kg	SW846 6010B	06/17-06/22/05	HDQ731AQ
		Dilution Factor: 1				

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-010

TOTAL Metals

Lot-Sample #...: A5F160286-010 Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium	18000 J	577	mg/kg	SW846 6010B	06/17-06/22/05	HDQ731AR
		Dilution Factor: 1				
Manganese	384 J	1.7	mg/kg	SW846 6010B	06/17-06/22/05	HDQ731AT
		Dilution Factor: 1				
Nickel	23.8	4.6	mg/kg	SW846 6010B	06/17-06/22/05	HDQ731AU
		Dilution Factor: 1				
Potassium	934 J	577	mg/kg	SW846 6010B	06/17-06/22/05	HDQ731AV
		Dilution Factor: 1				
Silver	1.2	1.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ731AW
		Dilution Factor: 1				
Sodium	330 B	577	mg/kg	SW846 6010B	06/17-06/22/05	HDQ731AX
		Dilution Factor: 1				
Vanadium	17.1 J	5.8	mg/kg	SW846 6010B	06/17-06/22/05	HDQ731A0
		Dilution Factor: 1				
Zinc	2190	11.5	mg/kg	SW846 6010B	06/17-06/23/05	HDQ731A1
		Dilution Factor: 5				
Mercury	1.4	0.12	mg/kg	SW846 7471A	06/17-06/20/05	HDQ731AD
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-010

General Chemistry

Lot-Sample #...: A5F160286-010 Work Order #...: HDQ73 Matrix.....: SO
Date Sampled...: 06/14/05 14:55 Date Received..: 06/16/05
% Moisture.....: 13

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	86.7	10.0	%	MCAWW 160.3 MOD	06/17-06/20/05	5168329

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-011

TOTAL Metals

Lot-Sample #...: A5F160286-011 Matrix.....: SO
Date Sampled...: 06/14/05 15:10 Date Received..: 06/16/05
% Moisture.....: 18

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5168039						
Aluminum	9660	24.4 Dilution Factor: 1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ751AF
Arsenic	14.4	1.2 Dilution Factor: 1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ751A2
Lead	997	1.8 Dilution Factor: 5	mg/kg	SW846 6010B	06/17-06/23/05	HDQ751A3
Antimony	1.8 B	7.3 Dilution Factor: 1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ751AG
Barium	278 J	24.4 Dilution Factor: 1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ751AH
Selenium	1.5	0.61 Dilution Factor: 1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ751AA
Beryllium	1.1	0.61 Dilution Factor: 1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ751AJ
Thallium	ND	1.2 Dilution Factor: 1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ751AC
Cadmium	4.7	0.61 Dilution Factor: 1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ751AK
Calcium	32100 J	610 Dilution Factor: 1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ751AL
Chromium	37.2 J	1.2 Dilution Factor: 1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ751AM
Cobalt	7.2	6.1 Dilution Factor: 1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ751AN
Copper	723 J	3.0 Dilution Factor: 1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ751AP
Iron	19300	12.2 Dilution Factor: 1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ751

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-011

TOTAL Metals

Lot-Sample #...: A5F160286-011

Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium	16100 J	610	mg/kg	SW846 6010B	06/17-06/22/05	HDQ751AR
		Dilution Factor: 1				
Manganese	329 J	1.8	mg/kg	SW846 6010B	06/17-06/22/05	HDQ751AT
		Dilution Factor: 1				
Nickel	40.5	4.9	mg/kg	SW846 6010B	06/17-06/22/05	HDQ751AU
		Dilution Factor: 1				
Potassium	1550 J	610	mg/kg	SW846 6010B	06/17-06/22/05	HDQ751AV
		Dilution Factor: 1				
Silver	0.92 B	1.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ751AW
		Dilution Factor: 1				
Sodium	288 B	610	mg/kg	SW846 6010B	06/17-06/22/05	HDQ751AX
		Dilution Factor: 1				
Vanadium	20.0 J	6.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ751A0
		Dilution Factor: 1				
Zinc	1730	12.2	mg/kg	SW846 6010B	06/17-06/23/05	HDQ751A1
		Dilution Factor: 5				
Mercury	0.69	0.12	mg/kg	SW846 7471A	06/17-06/20/05	HDQ751AD
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-011

General Chemistry

Lot-Sample #...: A5F160286-011 Work Order #...: HDQ75 Matrix.....: SO
Date Sampled...: 06/14/05 15:10 Date Received..: 06/16/05
% Moisture.....: 18

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	82.0	10.0	%	MCAWW 160.3 MOD	06/17-06/20/05	5168329

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-012

TOTAL Metals

Lot-Sample #...: A5F160286-012 Matrix.....: SO
Date Sampled...: 06/14/05 15:25 Date Received..: 06/16/05
% Moisture.....: 15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5168039						
Aluminum	4480	23.5	mg/kg	SW846 6010B	06/17-06/22/05	HDQ761AF
		Dilution Factor: 1				
Arsenic	7.0	1.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ761A2
		Dilution Factor: 1				
Lead	718	1.8	mg/kg	SW846 6010B	06/17-06/23/05	HDQ761A3
		Dilution Factor: 5				
Antimony	5.9 B	7.0	mg/kg	SW846 6010B	06/17-06/22/05	HDQ761AG
		Dilution Factor: 1				
Barium	180 J	23.5	mg/kg	SW846 6010B	06/17-06/22/05	HDQ761AH
		Dilution Factor: 1				
Selenium	1.1	0.59	mg/kg	SW846 6010B	06/17-06/22/05	HDQ761AA
		Dilution Factor: 1				
Beryllium	0.66	0.59	mg/kg	SW846 6010B	06/17-06/22/05	HDQ761AJ
		Dilution Factor: 1				
Thallium	ND	1.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ761AC
		Dilution Factor: 1				
Cadmium	5.9	0.59	mg/kg	SW846 6010B	06/17-06/22/05	HDQ761AK
		Dilution Factor: 1				
Calcium	103000 J	2930	mg/kg	SW846 6010B	06/17-06/23/05	HDQ761AL
		Dilution Factor: 5				
Chromium	24.5 J	1.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ761AM
		Dilution Factor: 1				
Cobalt	3.7 B	5.9	mg/kg	SW846 6010B	06/17-06/22/05	HDQ761AN
		Dilution Factor: 1				
Copper	412 J	2.9	mg/kg	SW846 6010B	06/17-06/22/05	HDQ761AP
		Dilution Factor: 1				
on	9840	11.7	mg/kg	SW846 6010B	06/17-06/22/05	HDQ761AQ
		Dilution Factor: 1				

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-012

TOTAL Metals

Lot-Sample #...: A5F160286-012 Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium	22300 J	586	mg/kg	SW846 6010B	06/17-06/22/05	HDQ761AR
		Dilution Factor: 1				
Manganese	241 J	1.8	mg/kg	SW846 6010B	06/17-06/22/05	HDQ761AT
		Dilution Factor: 1				
Nickel	17.5	4.7	mg/kg	SW846 6010B	06/17-06/22/05	HDQ761AU
		Dilution Factor: 1				
Potassium	950 J	586	mg/kg	SW846 6010B	06/17-06/22/05	HDQ761AV
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ761AW
		Dilution Factor: 1				
Sodium	695	586	mg/kg	SW846 6010B	06/17-06/22/05	HDQ761AX
		Dilution Factor: 1				
Vanadium	13.9 J	5.9	mg/kg	SW846 6010B	06/17-06/22/05	HDQ761A0
		Dilution Factor: 1				
Zinc	2260	11.7	mg/kg	SW846 6010B	06/17-06/23/05	HDQ761A1
		Dilution Factor: 5				
Mercury	0.48	0.12	mg/kg	SW846 7471A	06/17-06/20/05	HDQ761AD
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-012

General Chemistry

Lot-Sample #...: A5F160286-012 Work Order #...: HDQ76 Matrix.....: SO
Date Sampled...: 06/14/05 15:25 Date Received..: 06/16/05
% Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	85.3	10.0	%	MCAWW 160.3 MOD	06/17-06/20/05	5168329

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-013

TOTAL Metals

Lot-Sample #...: A5F160286-013 Matrix.....: SO
Date Sampled...: 06/14/05 16:00 Date Received..: 06/16/05
% Moisture.....: 26

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5168039						
Aluminum	8470	27.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ791AF
		Dilution Factor: 1				
Arsenic	22.6	1.4	mg/kg	SW846 6010B	06/17-06/22/05	HDQ791A2
		Dilution Factor: 1				
Lead	1710	2.0	mg/kg	SW846 6010B	06/17-06/23/05	HDQ791A3
		Dilution Factor: 5				
Antimony	2.8 B	8.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ791AG
		Dilution Factor: 1				
Barium	634 J	27.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ791AH
		Dilution Factor: 1				
Selenium	2.1	0.68	mg/kg	SW846 6010B	06/17-06/22/05	HDQ791AA
		Dilution Factor: 1				
Beryllium	1.5	0.68	mg/kg	SW846 6010B	06/17-06/22/05	HDQ791AJ
		Dilution Factor: 1				
Thallium	1.4	1.4	mg/kg	SW846 6010B	06/17-06/22/05	HDQ791AC
		Dilution Factor: 1				
Cadmium	10.2	0.68	mg/kg	SW846 6010B	06/17-06/22/05	HDQ791AK
		Dilution Factor: 1				
Calcium	24800 J	676	mg/kg	SW846 6010B	06/17-06/22/05	HDQ791AL
		Dilution Factor: 1				
Chromium	45.1 J	1.4	mg/kg	SW846 6010B	06/17-06/22/05	HDQ791AM
		Dilution Factor: 1				
Cobalt	8.2	6.8	mg/kg	SW846 6010B	06/17-06/22/05	HDQ791AN
		Dilution Factor: 1				
Copper	571 J	3.4	mg/kg	SW846 6010B	06/17-06/22/05	HDQ791AP
		Dilution Factor: 1				
Iron	25500	13.5	mg/kg	SW846 6010B	06/17-06/22/05	HDQ791
		Dilution Factor: 1				

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-013

TOTAL Metals

Lot-Sample #...: A5F160286-013 Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium	9680 J	676	mg/kg	SW846 6010B	06/17-06/22/05	HDQ791AR
		Dilution Factor: 1				
Manganese	444 J	2.0	mg/kg	SW846 6010B	06/17-06/22/05	HDQ791AT
		Dilution Factor: 1				
Nickel	35.2	5.4	mg/kg	SW846 6010B	06/17-06/22/05	HDQ791AU
		Dilution Factor: 1				
Potassium	1420 J	676	mg/kg	SW846 6010B	06/17-06/22/05	HDQ791AV
		Dilution Factor: 1				
Silver	1.1 B	1.4	mg/kg	SW846 6010B	06/17-06/22/05	HDQ791AW
		Dilution Factor: 1				
Sodium	660 B	676	mg/kg	SW846 6010B	06/17-06/22/05	HDQ791AX
		Dilution Factor: 1				
Vanadium	28.8 J	6.8	mg/kg	SW846 6010B	06/17-06/22/05	HDQ791A0
		Dilution Factor: 1				
Zinc	2960	13.5	mg/kg	SW846 6010B	06/17-06/23/05	HDQ791A1
		Dilution Factor: 5				
Mercury	1.3	0.14	mg/kg	SW846 7471A	06/17-06/20/05	HDQ791AD
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-013

General Chemistry

Lot-Sample #...: A5F160286-013 Work Order #...: HDQ79 Matrix.....: SO
Date Sampled...: 06/14/05 16:00 Date Received..: 06/16/05
% Moisture.....: 26

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	73.9	10.0	%	MCAWW 160.3 MOD	06/17-06/20/05	5168329

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-014

TOTAL Metals

Lot-Sample #...: A5F160286-014 Matrix.....: SO
Date Sampled...: 06/14/05 16:15 Date Received..: 06/16/05
% Moisture.....: 22

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5168039						
Aluminum	4680	25.5	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8C1AF
		Dilution Factor: 1				
Arsenic	10.8	1.3	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8C1A2
		Dilution Factor: 1				
Lead	1660	1.9	mg/kg	SW846 6010B	06/17-06/23/05	HDQ8C1A3
		Dilution Factor: 5				
Antimony	2.6 B	7.7	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8C1AG
		Dilution Factor: 1				
Barium	600 J	25.5	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8C1AH
		Dilution Factor: 1				
Selenium	1.6	0.64	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8C1AA
		Dilution Factor: 1				
Beryllium	0.72	0.64	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8C1AJ
		Dilution Factor: 1				
Thallium	0.76 B	1.3	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8C1AC
		Dilution Factor: 1				
Cadmium	7.8	0.64	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8C1AK
		Dilution Factor: 1				
Calcium	40900 J	639	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8C1AL
		Dilution Factor: 1				
Chromium	30.6 J	1.3	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8C1AM
		Dilution Factor: 1				
Cobalt	5.6 B	6.4	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8C1AN
		Dilution Factor: 1				
Copper	314 J	3.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8C1AP
		Dilution Factor: 1				
on	22900	12.8	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8C1AQ
		Dilution Factor: 1				

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-014

TOTAL Metals

Lot-Sample #...: A5F160286-014 Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium	11800 J	639	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8C1AR
		Dilution Factor: 1				
Manganese	310 J	1.9	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8C1AT
		Dilution Factor: 1				
Nickel	27.7	5.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8C1AU
		Dilution Factor: 1				
Potassium	959 J	639	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8C1AV
		Dilution Factor: 1				
Silver	1.0 B	1.3	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8C1AW
		Dilution Factor: 1				
Sodium	388 B	639	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8C1AX
		Dilution Factor: 1				
Vanadium	17.1 J	6.4	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8C1A0
		Dilution Factor: 1				
Zinc	2480	12.8	mg/kg	SW846 6010B	06/17-06/23/05	HDQ8C1A1
		Dilution Factor: 5				
Mercury	0.65	0.13	mg/kg	SW846 7471A	06/17-06/20/05	HDQ8C1AD
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-014

General Chemistry

Lot-Sample #...: A5F160286-014 Work Order #...: HDQ8C Matrix.....: SO
Date Sampled...: 06/14/05 16:15 Date Received..: 06/16/05
% Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	78.3	10.0	%	MCAWW 160.3 MOD	06/17-06/20/05	5168329

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-015

TOTAL Metals

Lot-Sample #...: A5F160286-015 Matrix.....: SO
Date Sampled...: 06/14/05 16:35 Date Received..: 06/16/05
% Moisture.....: 2.9

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5168039						
Aluminum	3770	20.6	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8D1AF
		Dilution Factor: 1				
Arsenic	6.4	1.0	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8D1A2
		Dilution Factor: 1				
Lead	1490	1.5	mg/kg	SW846 6010B	06/17-06/23/05	HDQ8D1A3
		Dilution Factor: 5				
Antimony	2.2 B	6.2	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8D1AG
		Dilution Factor: 1				
Barium	216 J	20.6	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8D1AH
		Dilution Factor: 1				
Selenium	1.3	0.51	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8D1AA
		Dilution Factor: 1				
Beryllium	0.61	0.51	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8D1AJ
		Dilution Factor: 1				
Thallium	0.57 B	1.0	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8D1AC
		Dilution Factor: 1				
Cadmium	6.8	0.51	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8D1AK
		Dilution Factor: 1				
Calcium	44400 J	515	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8D1AL
		Dilution Factor: 1				
Chromium	30.5 J	1.0	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8D1AM
		Dilution Factor: 1				
Cobalt	3.9 B	5.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8D1AN
		Dilution Factor: 1				
Copper	846 J	2.6	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8D1AP
		Dilution Factor: 1				
Iron	15900	10.3	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8D1.
		Dilution Factor: 1				

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-015

TOTAL Metals

Lot-Sample #...: A5F160286-015 Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium	23100 J	515	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8D1AR
		Dilution Factor: 1				
Manganese	303 J	1.5	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8D1AT
		Dilution Factor: 1				
Nickel	34.2	4.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8D1AU
		Dilution Factor: 1				
Potassium	482 B,J	515	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8D1AV
		Dilution Factor: 1				
Silver	1.0	1.0	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8D1AW
		Dilution Factor: 1				
Sodium	617	515	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8D1AX
		Dilution Factor: 1				
Vanadium	14.8 J	5.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8D1A0
		Dilution Factor: 1				
Zinc	2960	10.3	mg/kg	SW846 6010B	06/17-06/23/05	HDQ8D1A1
		Dilution Factor: 5				
Mercury	1.4	0.10	mg/kg	SW846 7471A	06/17-06/20/05	HDQ8D1AD
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-015

General Chemistry

Lot-Sample #...: A5F160286-015 Work Order #...: HDQ8D Matrix.....: SO
Date Sampled...: 06/14/05 16:35 Date Received..: 06/16/05
% Moisture.....: 2.9

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	97.1	10.0	%	MCAWW 160.3 MOD	06/27-06/28/05	5179117

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-016

TOTAL Metals

Lot-Sample #...: A5F160286-016 Matrix.....: SO
Date Sampled...: 06/14/05 16:50 Date Received..: 06/16/05
% Moisture.....: 6.3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5168039						
Aluminum	3570	21.3	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8E1AF
		Dilution Factor: 1				
Arsenic	10.0	1.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8E1A2
		Dilution Factor: 1				
Lead	2020	6.4	mg/kg	SW846 6010B	06/17-06/23/05	HDQ8E1A3
		Dilution Factor: 20				
Antimony	6.0 B	6.4	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8E1AG
		Dilution Factor: 1				
Barium	166 J	21.3	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8E1AH
		Dilution Factor: 1				
Selenium	11.8	0.53	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8E1AA
		Dilution Factor: 1				
Beryllium	2.8	0.53	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8E1AJ
		Dilution Factor: 1				
Thallium	0.65 B	1.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8E1AC
		Dilution Factor: 1				
Cadmium	18.5	0.53	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8E1AK
		Dilution Factor: 1				
Calcium	48800 J	534	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8E1AL
		Dilution Factor: 1				
Chromium	57.3 J	1.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8E1AM
		Dilution Factor: 1				
Cobalt	3.7 B	5.3	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8E1AN
		Dilution Factor: 1				
Copper	7340 J	53.4	mg/kg	SW846 6010B	06/17-06/23/05	HDQ8E1AP
		Dilution Factor: 20				
Iron	17500	10.7	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8E1AQ
		Dilution Factor: 1				

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Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-016

TOTAL Metals

Lot-Sample #...: A5F160286-016 Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Magnesium	24300 J	534	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8E1AR
		Dilution Factor: 1				
Manganese	380 J	1.6	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8E1AT
		Dilution Factor: 1				
Nickel	149	4.3	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8E1AU
		Dilution Factor: 1				
Potassium	470 B,J	534	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8E1AV
		Dilution Factor: 1				
Silver	2.6	1.1	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8E1AW
		Dilution Factor: 1				
Sodium	1470	534	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8E1AX
		Dilution Factor: 1				
Vanadium	11.6 J	5.3	mg/kg	SW846 6010B	06/17-06/22/05	HDQ8E1A0
		Dilution Factor: 1				
Zinc	11500	42.7	mg/kg	SW846 6010B	06/17-06/23/05	HDQ8E1A1
		Dilution Factor: 20				
Mercury	0.72	0.11	mg/kg	SW846 7471A	06/17-06/20/05	HDQ8E1AD
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-016

General Chemistry

Lot-Sample #...: A5F160286-016 Work Order #...: HDQ8E Matrix.....: SO
Date Sampled...: 06/14/05 16:50 Date Received..: 06/16/05
% Moisture.....: 6.3

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	93.7	10.0	%	MCAWW 160.3 MOD	06/17-06/20/05	5168329

Dilution Factor: 1

SEVERN TRENT STL

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ANALYTICAL REPORT

PROJECT NO. 39826

H. KRAMER CHICAGO

Lot #: A5F290292

Julie Czech

Conestoga-Rovers & Associates
8615 W. Bryn Mawr
Chicago, IL 60631

SEVERN TRENT LABORATORIES, INC.

Amy L. McCormick
Project Manager

July 7, 2005

CASE NARRATIVE

A5F290292

The following report contains the analytical results for five solid samples submitted to STL North Canton by Conestoga-Rovers & Associates, Inc. from the H. Kramer Chicago Site, project number 39826. The samples were originally received June 16, 2005, according to documented sample acceptance procedures and were analyzed for a variety of parameters. Additional analyses were requested on June 29, 2005.

STL utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Julie Czech on July 06, 2005. A summary of QC data for these analyses is included at the back of the report.

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

All solid sample results are reported on an "as received" basis unless otherwise indicated by a dry weight adjustment footnote at the bottom of the analytical report page. The list of parameters which are never reported on a dry weight basis is included on the Sample Summary.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Amy L. McCormick, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT." The total number of pages in this report is 18.

SUPPLEMENTAL QC INFORMATION

METALS

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. STL North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples. These QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. The only exception is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed below.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals
Methylene chloride	Phthalate Esters	Copper
Acetone		Iron
2-Butanone		Zinc
		Lead*

- *for analyses run on TJA Trace ICP, ICPMS or GFAA only*

QUALITY CONTROL ELEMENTS OF SW-846 METHODS
(Continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepped and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepped and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide, PCB, and PAH methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria.

STL North Canton Certifications and Approvals:

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225), Illinois (#200004), Kansas (#E10336), Massachusetts (#M-OH048), Maryland (#272), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), North Carolina (#39702), Ohio (#6090), OhioVAP (#CL0024), Rhode Island (#237), South Carolina (#92007001, #92007002, #92007003), Tennessee (#02903), Utah (#QUAN9), Virginia (#00011), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit, ACIL Seal of Excellence – Participating Lab Status Award (#82)

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EXECUTIVE SUMMARY - Detection Highlights

A5F290292

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-061405-WP-003 06/14/05 12:10 001				
Cadmium - TCLP	1.7	0.10	mg/L	SW846 6010B
Lead - TCLP	14.6	0.50	mg/L	SW846 6010B
S-061405-WP-004 06/14/05 12:20 002				
Cadmium - TCLP	0.67	0.10	mg/L	SW846 6010B
Lead - TCLP	1.8	0.50	mg/L	SW846 6010B
S-061405-WP-006 06/14/05 12:45 003				
Cadmium - TCLP	0.94	0.10	mg/L	SW846 6010B
Lead - TCLP	15.4	0.50	mg/L	SW846 6010B
S-061405-WP-010 06/14/05 14:55 004				
Lead - TCLP	1.4	0.50	mg/L	SW846 6010B
S-061405-WP-013 06/14/05 16:00 005				
Lead - TCLP	0.81	0.50	mg/L	SW846 6010B

ANALYTICAL METHODS SUMMARY

A5F290292

PARAMETER	ANALYTICAL METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A5F290292

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
HEL3E	001	S-061405-WP-003	06/14/05	12:10
HEL3X	002	S-061405-WP-004	06/14/05	12:20
HEL30	003	S-061405-WP-006	06/14/05	12:45
HEL32	004	S-061405-WP-010	06/14/05	14:55
HEL33	005	S-061405-WP-013	06/14/05	16:00

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-003

TCLP Metals

Lot-Sample #...: A5F290292-001 Matrix.....: SO
Date Sampled...: 06/14/05 12:10 Date Received..: 06/16/05
Leach Date.....: 06/30/05 Leach Batch #..: P518105

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5186022						
Arsenic	ND	0.50	mg/L	SW846 6010B	07/05/05	HEL3E1AA
		Dilution Factor: 1				
Barium	ND	10.0	mg/L	SW846 6010B	07/05/05	HEL3E1AC
		Dilution Factor: 1				
Cadmium	1.7	0.10	mg/L	SW846 6010B	07/05/05	HEL3E1AD
		Dilution Factor: 1				
Chromium	ND	0.50	mg/L	SW846 6010B	07/05/05	HEL3E1AE
		Dilution Factor: 1				
Lead	14.6	0.50	mg/L	SW846 6010B	07/05/05	HEL3E1AF
		Dilution Factor: 1				
Selenium	ND	0.25	mg/L	SW846 6010B	07/05/05	HEL3E1AG
		Dilution Factor: 1				
Silver	ND	0.50	mg/L	SW846 6010B	07/05/05	HEL3E1AH
		Dilution Factor: 1				
Mercury	ND	0.0020	mg/L	SW846 7470A	07/05/05	HEL3E1AJ
		Dilution Factor: 1				

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-004

TCLP Metals

Lot-Sample #...: A5F290292-002 Matrix.....: SO
Date Sampled...: 06/14/05 12:20 Date Received..: 06/16/05
Leach Date.....: 06/30/05 Leach Batch #..: P518105

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5186022						
Arsenic	ND	0.50	mg/L	SW846 6010B	07/05/05	HEL3X1AA
		Dilution Factor: 1				
Barium	ND	10.0	mg/L	SW846 6010B	07/05/05	HEL3X1AC
		Dilution Factor: 1				
Cadmium	0.67	0.10	mg/L	SW846 6010B	07/05/05	HEL3X1AD
		Dilution Factor: 1				
Chromium	ND	0.50	mg/L	SW846 6010B	07/05/05	HEL3X1AE
		Dilution Factor: 1				
Lead	1.8	0.50	mg/L	SW846 6010B	07/05/05	HEL3X1AF
		Dilution Factor: 1				
Selenium	ND	0.25	mg/L	SW846 6010B	07/05/05	HEL3X1AG
		Dilution Factor: 1				
Silver	ND	0.50	mg/L	SW846 6010B	07/05/05	HEL3X1AH
		Dilution Factor: 1				
Mercury	ND	0.0020	mg/L	SW846 7470A	07/05/05	HEL3X1AJ
		Dilution Factor: 1				

NOTE(S):
Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-006

TCLP Metals

Lot-Sample #...: A5F290292-003 Matrix.....: SO
Date Sampled...: 06/14/05 12:45 Date Received..: 06/16/05
Leach Date.....: 06/30/05 Leach Batch #..: P518105

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5186022						
Arsenic	ND	0.50	mg/L	SW846 6010B	07/05/05	HEL301AA
		Dilution Factor: 1				
Barium	ND	10.0	mg/L	SW846 6010B	07/05/05	HEL301AC
		Dilution Factor: 1				
Cadmium	0.94	0.10	mg/L	SW846 6010B	07/05/05	HEL301AD
		Dilution Factor: 1				
Chromium	ND	0.50	mg/L	SW846 6010B	07/05/05	HEL301AE
		Dilution Factor: 1				
Lead	15.4	0.50	mg/L	SW846 6010B	07/05-07/06/05	HEL301AF
		Dilution Factor: 2				
Selenium	ND	0.25	mg/L	SW846 6010B	07/05/05	HEL301AG
		Dilution Factor: 1				
Silver	ND	0.50	mg/L	SW846 6010B	07/05/05	HEL301AH
		Dilution Factor: 1				
Mercury	ND	0.0020	mg/L	SW846 7470A	07/05/05	HEL301AJ
		Dilution Factor: 1				

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-010

TCLP Metals

Lot-Sample #...: A5F290292-004 Matrix.....: SO
Date Sampled...: 06/14/05 14:55 Date Received..: 06/16/05
Leach Date.....: 06/30/05 Leach Batch #..: P518105

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5186022						
Arsenic	ND	0.50	mg/L	SW846 6010B	07/05/05	HEL321AA
		Dilution Factor: 1				
Barium	ND	10.0	mg/L	SW846 6010B	07/05/05	HEL321AC
		Dilution Factor: 1				
Cadmium	ND	0.10	mg/L	SW846 6010B	07/05/05	HEL321AD
		Dilution Factor: 1				
Chromium	ND	0.50	mg/L	SW846 6010B	07/05/05	HEL321AE
		Dilution Factor: 1				
Lead	1.4	0.50	mg/L	SW846 6010B	07/05/05	HEL321AF
		Dilution Factor: 1				
Selenium	ND	0.25	mg/L	SW846 6010B	07/05/05	HEL321AG
		Dilution Factor: 1				
Silver	ND	0.50	mg/L	SW846 6010B	07/05/05	HEL321AH
		Dilution Factor: 1				
Mercury	ND	0.0020	mg/L	SW846 7470A	07/05/05	HEL321AJ
		Dilution Factor: 1				

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-061405-WP-013

TCLP Metals

Lot-Sample #...: A5F290292-005 Matrix.....: SO
Date Sampled...: 06/14/05 16:00 Date Received..: 06/16/05
Leach Date.....: 06/30/05 Leach Batch #..: P518105

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5186022						
Arsenic	ND	0.50	mg/L	SW846 6010B	07/05/05	HEL331AA
		Dilution Factor: 1				
Barium	ND	10.0	mg/L	SW846 6010B	07/05/05	HEL331AC
		Dilution Factor: 1				
Cadmium	ND	0.10	mg/L	SW846 6010B	07/05/05	HEL331AD
		Dilution Factor: 1				
Chromium	ND	0.50	mg/L	SW846 6010B	07/05/05	HEL331AE
		Dilution Factor: 1				
Lead	0.81	0.50	mg/L	SW846 6010B	07/05/05	HEL331AF
		Dilution Factor: 1				
Selenium	ND	0.25	mg/L	SW846 6010B	07/05/05	HEL331AG
		Dilution Factor: 1				
Silver	ND	0.50	mg/L	SW846 6010B	07/05/05	HEL331AH
		Dilution Factor: 1				
Mercury	ND	0.0020	mg/L	SW846 7470A	07/05/05	HEL331AJ
		Dilution Factor: 1				

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

SEVERN TRENT STL

QUALITY CONTROL SECTION

METHOD BLANK REPORT

TCLP Metals

Client Lot #...: A5F290292 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A5F300000-335 Prep Batch #...: 5186022						
Leach Date.....: 06/30/05 Leach Batch #..: P518105						
Arsenic	ND	0.50	mg/L	SW846 6010B	07/05/05	HEN9A1AD
		Dilution Factor: 1				
Barium	ND	10.0	mg/L	SW846 6010B	07/05/05	HEN9A1AE
		Dilution Factor: 1				
Cadmium	ND	0.10	mg/L	SW846 6010B	07/05/05	HEN9A1AF
		Dilution Factor: 1				
Chromium	ND	0.50	mg/L	SW846 6010B	07/05/05	HEN9A1AG
		Dilution Factor: 1				
Lead	ND	0.25	mg/L	SW846 6010B	07/05/05	HEN9A1AH
		Dilution Factor: 1				
Selenium	ND	0.25	mg/L	SW846 6010B	07/05/05	HEN9A1A
		Dilution Factor: 1				
Silver	ND	0.50	mg/L	SW846 6010B	07/05/05	HEN9A1AK
		Dilution Factor: 1				
Mercury	ND	0.0020	mg/L	SW846 7470A	07/05/05	HEN9A1AC
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TCLP Metals

Client Lot #...: A5F290292 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A5G050000-022 Prep Batch #...: 5186022						
Arsenic	ND	0.50	mg/L	SW846 6010B	07/05/05	HEVRX1AA
		Dilution Factor: 1				
Barium	ND	10.0	mg/L	SW846 6010B	07/05/05	HEVRX1AC
		Dilution Factor: 1				
Cadmium	ND	0.10	mg/L	SW846 6010B	07/05/05	HEVRX1AD
		Dilution Factor: 1				
Chromium	ND	0.50	mg/L	SW846 6010B	07/05/05	HEVRX1AE
		Dilution Factor: 1				
Lead	ND	0.25	mg/L	SW846 6010B	07/05/05	HEVRX1AF
		Dilution Factor: 1				
Selenium	ND	0.25	mg/L	SW846 6010B	07/05/05	HEVRX1AG
		Dilution Factor: 1				
Silver	ND	0.50	mg/L	SW846 6010B	07/05/05	HEVRX1AH
		Dilution Factor: 1				
Mercury	ND	0.0020	mg/L	SW846 7470A	07/05/05	HEVRX1AJ
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: A5F290292 Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A5G050000-022 Prep Batch #...: 5186022					
Arsenic	98	(50 - 150)	SW846 6010B Dilution Factor: 1	07/05/05	HEVRX1AK
Barium	102	(50 - 150)	SW846 6010B Dilution Factor: 1	07/05/05	HEVRX1AL
Cadmium	106	(50 - 150)	SW846 6010B Dilution Factor: 1	07/05/05	HEVRX1AM
Chromium	99	(50 - 150)	SW846 6010B Dilution Factor: 1	07/05/05	HEVRX1AN
Lead	100	(50 - 150)	SW846 6010B Dilution Factor: 1	07/05/05	HEVRX1AP
Selenium	100	(50 - 150)	SW846 6010B Dilution Factor: 1	07/05/05	HEVRX1AQ
Silver	113	(50 - 150)	SW846 6010B Dilution Factor: 1	07/05/05	HEVRX1AR
Mercury	128	(50 - 150)	SW846 7470A Dilution Factor: 1	07/05/05	HEVRX1AT

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: A5F290292 Matrix.....: SO
Date Sampled...: 06/14/05 12:10 Date Received..: 06/16/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A5F290292-001 Prep Batch #...: 5186022							
Leach Date.....: 06/30/05 Leach Batch #..: P518105							
Arsenic	100	(50 - 150)			SW846 6010B	07/05/05	HEL3E1AL
	101	(50 - 150)	0.06	(0-20)	SW846 6010B	07/05/05	HEL3E1AM
		Dilution Factor: 5					
Barium	99	(50 - 150)			SW846 6010B	07/05/05	HEL3E1AN
	99	(50 - 150)	0.58	(0-20)	SW846 6010B	07/05/05	HEL3E1AP
		Dilution Factor: 5					
Cadmium	107	(50 - 150)			SW846 6010B	07/05/05	HEL3E1AQ
	108	(50 - 150)	0.07	(0-20)	SW846 6010B	07/05/05	HEL3E1AR
		Dilution Factor: 5					
Chromium	98	(50 - 150)			SW846 6010B	07/05/05	HEL3E1AT
	98	(50 - 150)	0.14	(0-20)	SW846 6010B	07/05/05	HEL3E1AU
		Dilution Factor: 5					
Lead	101	(50 - 150)			SW846 6010B	07/05/05	HEL3E1AV
	100	(50 - 150)	0.40	(0-20)	SW846 6010B	07/05/05	HEL3E1AW
		Dilution Factor: 5					
Selenium	101	(50 - 150)			SW846 6010B	07/05/05	HEL3E1AX
	101	(50 - 150)	0.20	(0-20)	SW846 6010B	07/05/05	HEL3E1A0
		Dilution Factor: 5					
Silver	105	(50 - 150)			SW846 6010B	07/05/05	HEL3E1A1
	105	(50 - 150)	0.33	(0-20)	SW846 6010B	07/05/05	HEL3E1A2
		Dilution Factor: 5					
Mercury	119	(50 - 150)			SW846 7470A	07/05/05	HEL3E1A3
	116	(50 - 150)	2.4	(0-20)	SW846 7470A	07/05/05	HEL3E1A4
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SEVERN TRENT STL

END OF REPORT

APPENDIX I

DATA VALIDATION MEMORANDUM - PHASE 1

CHICAGO FILE COPY

CONESTOGA-ROVERS & ASSOCIATES

8615 W. Bryn Mawr Avenue, Chicago, Illinois 60631
Telephone: (773) 380-9933 Fax: (773) 380-6421
www.CRAworld.com

MEMORANDUM

TO: Walt Pochron

REF. NO.: 039826

FROM: Julie Czech JgC

DATE: July 7, 2005

RE: **Data Quality Assessment and Validation for Soil Samples Collected from the H. Kramer Site in Chicago, Illinois**

The following details a data quality assessment and validation for soil samples collected June 14, 2005 from the H. Kramer Site in Chicago, Illinois. The samples identified in Table 1 were analyzed for the parameters listed in Table 2 by Severn Trent Laboratories of North Canton, Ohio. The analytical methods are identified in Table 2. The quality assurance criteria used to assess the data were established by the method[1].

Holding Time Periods

The holding time periods are presented in Table 3. The samples were prepared and analyzed within the required holding time periods.

thod Blank Samples

Contamination of samples contributed by laboratory conditions or procedures was monitored by the data from concurrent preparation and analysis of method blank samples. The method blank sample data were acceptable.

Laboratory Control Sample (LCS) Analyses

The accuracy of the analyses was assessed by evaluating the percent recovery data from LCS analyses. The LCS percent recovery data were acceptable.

Overall Assessment

The data were found to exhibit acceptable levels of accuracy and are suitable for their intended use without qualification.

Attachments

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[1] Application of quality assurance criteria was consistent with the relevant criteria in "USEPA Contract Laboratory ogram National Functional Guidelines for Inorganic Data Review", EPA 540/R-94-013, February 1994.

REGISTERED COMPANY ISO 9001 ENGINEERING DESIGN

EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER

TABLE 2

SUMMARY OF ANALYTICAL METHODS
H. KRAMER SITE
CHICAGO, ILLINOIS

Parameter	*Analytical Method*[1]	
Total Metals	SW-846	6010B/7471A

[1] SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA SW-846, 3rd Edition with Updates I through III, November 1986.

CRA 039826M-1-T2

CONESTOGA-ROVERS & ASSOCIATES

8615 W. Bryn Mawr Avenue, Chicago, Illinois 60631
Telephone: (773) 380-9933 Fax: (773) 380-6421
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MEMORANDUM

TO: Walt Pochron

REF. NO.: 039826

FROM: Julie Czech/lg/2

DATE: July 13, 2005

RE: **Data Quality Assessment and Validation for Select Soil Samples Collected from the H. Kramer Site in Chicago, Illinois**

The following details a data quality assessment and validation for select soil samples collected June 14, 2005 from the H. Kramer Site in Chicago, Illinois. The samples identified in Table 1 were analyzed for the parameters listed in Table 2 by Severn Trent Laboratories of North Canton, Ohio. The analytical methods are identified in Table 2. The quality assurance criteria used to assess the data were established by the methods[1].

Holding Time Periods

The holding time periods are presented in Table 3. The samples were prepared and analyzed within the required holding time periods.

Method Blank Samples

Contamination of samples contributed by laboratory conditions or procedures was monitored by the data from concurrent preparation and analysis of method blank samples. The method blank sample data were acceptable.

Laboratory Control Sample (LCS) Analyses

The accuracy of the analyses was assessed by evaluating the percent recovery data from LCS analyses. The LCS percent recovery data were acceptable.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Sample Analyses

To assess the accuracy and precision of the analytical method relative to the sample matrices, MS/MSD percent recoveries and RPDs were determined. The MS/MSD percent recovery and RPD data were acceptable.

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[1] Application of quality assurance criteria was consistent with the relevant criteria in "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review", EPA 540/R-94-013, February 1994.

REGISTERED COMPANY ISO 9001 ENGINEERING DESIGN

EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER

TABLE 1

SAMPLE IDENTIFICATION NUMBERS
H. KRAMER SITE
CHICAGO, ILLINOIS

Sample ID
S-061405-WP-003
S-061405-WP-004
S-061405-WP-006
S-061405-WP-010
S-061405-WP-013

TABLE 3

HOLDING TIME PERIODS
H. KRAMER SITE
CHICAGO, ILLINOIS

Parameter	*Holding Time Period*
TCLP Metals	- 180 days from sample collection to TCLP extraction (mercury - 28 days) - 180 days from TCLP extraction to completion of analysis (mercury - 28 days)

APPENDIX J

ILLINOIS EPA SOIL ANALYTICAL DATA

H. KRAMER & COMPANY

Chicago, Illinois

TABLE 1

Analytical Results (Qualified Data)

Site : H. KRAMER & CO.

Lab. : STL - UNIVERSITY PARK, IL

Sampling Location :	Soil Benchmarks	X101		X102		X103		X104		X105		X106		X107		X108		X109		X110	
Matrix :	Soil	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Date Sampled :		6/14/05		6/14/05		6/14/05		6/14/05		6/14/05		6/14/05		6/14/05		6/14/05		6/14/05		6/14/05	
Time Sampled :	Removal Action Guidelines	11:50		12:00		12:10		12:20		12:35		12:45		14:00		14:15		14:35		14:55	
ANALYTE		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	780000	6400		2900		2800		5500		4600		7300		6800		10000		3500		5600	
ANTIMONY	310	23		14		59		22		12		28		4.6		1.4		2.5		8.8	
ARSENIC	200	17		5.6		33		11		9.9		15		21		7.4		15		20	
BARIUM	55000	1500		130		320		240		180		160		600		130		270		440	
BERYLLIUM	15	2.7		1.5		3.2		5.8		2.1		14		1.2		0.69		0.57		1.0	
BORON	[illegible]	160		59		180		180		85		370		25		12		14		23	
CADMIUM	390	39		40		200		62		37		180		5.3		1.3		4.1		6.1	
CALCIUM	[illegible]	71000		130000		30000		56000		10000		37000		85000		20000		62000		42000	
CHROMIUM	3900	43		31		37		53		27		140		36		28		22		29	
COBALT	47000	6.5		3.5		4.0		5.9		6.9		14		6.9		11		4.6		6.9	
COPPER	31000	5200		8400		8500		12000		4600		15000		360		79		270		1200	
IRON	230000	28000		11000		15000		23000		21000		44000		31000		20000		26000		22000	
LEAD	1000	4400		3700		65000		8400		5000		24000		2300		120		870		2500	
MAGNESIUM	[illegible]	25000		66000		12000		19000		46000		13000		16000		11000		11000		18000	
MANGANESE	18000	930		330		290		540		470		840		450		640		380		460	
MERCURY	230	0.72		0.34		0.14		0.42		0.41		0.70		0.57		0.093		0.45		1.3	
NICKEL	16000	95		67		88		160		61		330		27		21		17		30	
POTASSIUM	[illegible]	300		950		450		290		100		100		300		2000		410		1200	
SELENIUM	3900	2.4		5.2		6.8		2.5		2.2		5.6		1.3		1.0	U	1.0	U	1.4	
SILVER	[illegible]	3.6		2.8		22		6.3		3.3		32		11		0.69		0.55		1.8	
SODIUM	**	970		400		920		1400		1000		4600		520		840		250		280	
STRONTIUM	[illegible]	130		85		56		90		75		75		48		24		40		50	
THALLIUM	55	1.0	U	0.92	U	1.8		1.0	U	0.99	U	0.82	B	1.0	B	1.0	U	0.69	B	1.1	U
VANADIUM	5500	92		10		9.4		14		13		18		28		25		17		21	
ZINC	230000	22000		49000		290000		64000		32000		180000		1500		1600		1100		2900	

-- ** No RAL Benchmark designated at the current time.

HK 01345

H. KRAMER & COMPANY
Chicago, Illinois

TABLE 1 (cont.)

Analytical Results (Qualified Data)

Site : H. KRAMER & CO.
Lab. : STL - UNIVERSITY PARK, IL.

Sampling Location :	Soil Benchmarks	X111		X112		X113		X114		X115		X116		X117	
Matrix :	Soil	Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	mg/kg	mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg		mg/kg	
Date Sampled :		6/14/05		6/14/05		6/14/05		6/14/05		6/14/05		6/14/05		6/14/05	
Time Sampled :	Removal Action Guidelines	15:10		15:25		16:00		16:15		16:35		16:50		16:50	
ANALYTE		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ALUMINUM	780000	8700		6800		7200		6600		3900		4200		3900	
ANTIMONY	310	3.8		5.3		4.6		3.4		4.3		16		17	
ARSENIC	200	13		10		27		12		7.7		14		12	
BARIUM	55000	300		270		580		610		160		230		180	
BERYLLIUM	15	0.97		1.1		1.1		1.0		0.69		3.7		3.1	
BORON		20		30		28		31		21		48		43	
CADMIUM	390	6.1		6.9		9.1		8.3		7.1		22		20	
CALCIUM		34000		55000		39000		44000		49000		70000		66000	
CHROMIUM	3900	40		49		63		34		39		77		71	
COBALT	47000	6.3		6.3		9.5		6.7		3.8		4.5		4.5	
COPPER	31000	710		630		620		350		980		10000		9700	
IRON	230000	24000		17000		21000		20000		19000		23000		22000	
LEAD	1000	1100		1100		2200		2000		1700		2600		2300	
MAGNESIUM		14000		23000		14000		19000		24000		30000		31000	
MANGANESE	18000	400		370		420		340		390		480		470	
MERCURY	230	0.42		0.45		0.47		0.42		0.67		0.17		0.40	
NICKEL	16000	36		28		38		27		34		180		180	
POTASSIUM		1600		1700		1300		1700		1600		750		750	
SELENIUM	3900	1.3		1.1	B	1.4		1.3		0.85	B	19		15	
SILVER	3900	0.68		0.78		1.7		0.7		2.0		4.0		3.5	
SODIUM	**	230		350		540		330		440		620		610	
STRONTIUM		51		62		54		66		43		65		62	
THALLIUM	55	1.2	U	1.1	U	0.79	B	0.78	B	0.54	B	0.95	U	0.88	U
VANADIUM	5500	22		21		25		24		16		15		16	
ZINC	230000	3000		3300		3900		2700		3400		17000		16000	

-- ** No RAL Benchmark designated at the current time.

HK 01346

H. KRAMER & COMPANY

Chicago, Illinois

TABLE 2

TCLP

Analytical Results (Qualified Data)

Site : H. KRAMER & C

Lab. : STL-UNIVERSIT

Sampling Location :		X101		X102		X103		X104		X105		X106		X107		X108		X109		X110	
Matrix :	Soil	Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	Toxicity	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Date Sampled :	Characteristic	6/14/05		6/14/05		6/14/05		6/14/05		6/14/05		6/14/05		6/14/05		6/14/05		6/14/05		6/14/05	
Time Sampled :	Regulatory	11:50		12:00		12:10		12:20		12:35		12:45		14:00		14:15		14:35		14:55	
	Levels mg/L																				
ANALYTE		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ARSENIC TCLP	5	0.10	U	0.10	U	0.10	U	0.014	B	0.10	U	0.10	U	0.018	B	0.10	U	0.014	B	0.022	B
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
CADMIUM TCLP	1	0.66		0.87		1.3		0.49		0.53		1.0		0.020	B	0.009	B	0.029	B	0.058	
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
LEAD TCLP	5	5.9		20		13		1.4		10		29		0.33		0.046	B	0.37		1.0	
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
SELENIUM TCLP	1	0.10	U	0.025	B	0.10	U	0.012	B	0.012	B	0.011	B	0.10	U	0.10	U	0.10	U	0.10	U
[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]

H. KRAMER & COMPANY

Chicago, Illinois

TABLE 2 (cont.)

TCLP

Analytical Results (Qualified Data)

Site :

Lab. :

Sampling Location :		X111		X112		X113		X114		X115		X116		X117	
Matrix :	Soil	Soil		Soil		Soil		Soil		Soil		Soil		Soil	
Units :	Toxicity	mg/L		mg/L		mg/L		mg/L		mg/L		mg/L		mg/L	
Date Sampled :	Characteristic	6/14/05		6/14/05		6/14/05		6/14/05		6/14/05		6/14/05		6/14/05	
Time Sampled :	Regulatory Levels mg/L	15:10		15:25		16:00		16:15		16:35		16:50		16:50	
ANALYTE		Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag	Result	Flag
ARSENIC TCLP	5	0.012	B	0.016	B	0.033	B	0.022	B	0.10	U	0.066	B	0.088	B
BARIUM TCLP	100	0.24		0.33		0.58		0.34		0.30		0.24		0.27	
CADMIUM TCLP	1	0.025	B	0.037	B	0.063		0.042	B	0.061		0.35		0.35	
CHROMIUM TCLP	5	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.010	U	0.012	U
LEAD TCLP	5	0.14		0.16		0.73		0.35		23		4.3		2.4	
MERCURY TCLP	0.2	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U	0.0020	U
SELENIUM TCLP	1	0.10	U	0.10	U	0.10	U	0.10	U	0.10	U	0.14		0.15	
SILVER TCLP	5	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U	0.050	U

HK 01348

Labeled Soil Samples

APPENDIX K

STL ANALYTICAL REPORT - PHASE 2

SEVERN TRENT STL

Rec'd CRA

JUL 26 2005

STL North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

Tel: 330 497 9396 Fax: 330 497 0772
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ANALYTICAL REPORT

PROJECT NO. 39826

H. KRAMER

Lot #: A5G080236

Julie Czech

Conestoga-Rovers & Associates
8615 W. Bryn Mawr
Chicago, IL 60631

SEVERN TRENT LABORATORIES, INC.

Amy L. McCormick
Project Manager

VALIDATED DATA
Project # 039826
Lab Report # A5G080236
Initials
Date 07/29/05

July 22, 2005

CASE NARRATIVE
A5G080236

The following report contains the analytical results for forty-eight solid samples and two water samples submitted to STL North Canton by Conestoga-Rovers & Associates, Inc. from the H. Kramer Site, project number 39826. The samples were received July 08, 2005, according to documented sample acceptance procedures.

Sample(s) S-070705-JH-042 and JH-043 were received at the laboratory, but not listed on the chain-of-custody records. They were analyzed per the sample labels.

STL utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Julie Czech on July 19, 2005. A summary of QC data for these analyses is included at the back of the report.

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

All solid sample results are reported on an "as received" basis unless otherwise indicated by a dry weight adjustment footnote at the bottom of the analytical report page. The list of parameters which are never reported on a dry weight basis is included on the Sample Summary.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Amy L. McCormick, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT." The total number of pages in this report is 157.

CASE NARRATIVE (continued)

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperature of the cooler upon sample receipt was 3.8°C.

METALS

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive of mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

Serial dilution of a sample in this lot indicates that physical and chemical interferences were present. Refer to the sample report pages for the affected analytes flagged with "E".

The sample(s) had elevated reporting limits due to matrix interferences. Refer to the sample report pages for the affected analyte(s) flagged with "G".

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "J". Refer to the sample report pages for the affected analyte(s).

Matrix spike recovery and relative percent difference (RPD) data were not calculated for some analytes for S-070705-JH-001 and S-070705-JH-022 due to the sample concentration reading greater than four times the spike amount. See the Matrix Spike Report for the affected analytes which will be flagged with "NC, MSB".

The matrix spike/matrix spike duplicate(s) for S-070705-JH-001, S-070705-JH-022 and S-070705-JH-045 had RPD's and recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. STL North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples. These QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. The only exception is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed below.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals
Methylene chloride	Phthalate Esters	Copper
Acetone		Iron
2-Butanone		Zinc
		Lead*

- *for analyses run on TJA Trace ICP, ICPMS or GFAA only*

QUALITY CONTROL ELEMENTS OF SW-846 METHODS
(Continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepped and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepped and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide, PCB, and PAH methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria.

STL North Canton Certifications and Approvals:

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225), Illinois (#200004), Kansas (#E10336), Massachusetts (#M-OH048), Maryland (#272), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), North Carolina (#39702), Ohio (#6090), OhioVAP (#CL0024), Rhode Island (#237), South Carolina (#92007001, #92007002, #92007003), Tennessee (#02903), Utah (#QUAN9), Virginia (#00011), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit, ACIL Seal of Excellence – Participating Lab Status Award (#82)

Y:\Barb\STL headers\Qc846-Narrative_060204.doc, Revised06/02/04 DJL

EXECUTIVE SUMMARY - Detection Highlights

A5G080236

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070705-JH-001 07/07/05 001				
Mercury	0.34	0.16	mg/kg	SW846 7471A
Arsenic	3.6	1.6	mg/kg	SW846 6010B
Lead	158	0.48	mg/kg	SW846 6010B
Selenium	5.8	0.80	mg/kg	SW846 6010B
Thallium	0.86 B	1.6	mg/kg	SW846 6010B
Antimony	1.3 B	9.6	mg/kg	SW846 6010B
Beryllium	0.53 B,J	0.80	mg/kg	SW846 6010B
Cadmium	0.74 B	0.80	mg/kg	SW846 6010B
Chromium	9.1	1.6	mg/kg	SW846 6010B
Copper	36.5	4.0	mg/kg	SW846 6010B
Nickel	12.1	6.4	mg/kg	SW846 6010B
Zinc	636	3.2	mg/kg	SW846 6010B
Percent Solids	62.5	10.0	%	MCAWW 160.3 MOD
S-070705-JH-002 07/07/05 002				
Arsenic	3.8	1.2	mg/kg	SW846 6010B
Lead	13.8	0.37	mg/kg	SW846 6010B
Beryllium	0.36 B,J	0.62	mg/kg	SW846 6010B
Cadmium	0.26 B	0.62	mg/kg	SW846 6010B
Chromium	7.9	1.2	mg/kg	SW846 6010B
Copper	11.8	3.1	mg/kg	SW846 6010B
Nickel	10.5	5.0	mg/kg	SW846 6010B
Zinc	70.2	2.5	mg/kg	SW846 6010B
Percent Solids	80.1	10.0	%	MCAWW 160.3 MOD
S-070705-JH-003 07/07/05 003				
Mercury	0.030 B	0.10	mg/kg	SW846 7471A
Arsenic	1.8	1.0	mg/kg	SW846 6010B
Lead	532	0.31	mg/kg	SW846 6010B
Thallium	0.58 B	1.0	mg/kg	SW846 6010B
Antimony	1.3 B	6.1	mg/kg	SW846 6010B
Beryllium	0.27 B,J	0.51	mg/kg	SW846 6010B
Cadmium	1.8	0.51	mg/kg	SW846 6010B
Chromium	13.6	1.0	mg/kg	SW846 6010B
Copper	4690	2.6	mg/kg	SW846 6010B
Nickel	55.6	4.1	mg/kg	SW846 6010B
Silver	1.5	1.0	mg/kg	SW846 6010B
Zinc	3140	20.5	mg/kg	SW846 6010B
Percent Solids	97.8	10.0	%	MCAWW 160.3 MOD

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EXECUTIVE SUMMARY - Detection Highlights

A5G080236

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070705-JH-004 07/07/05 004				
Mercury	1.6	0.13	mg/kg	SW846 7471A
Arsenic	67.0	1.3	mg/kg	SW846 6010B
Lead	1280	0.38	mg/kg	SW846 6010B
Selenium	1.6	0.64	mg/kg	SW846 6010B
Antimony	3.5 B	7.7	mg/kg	SW846 6010B
Beryllium	1.2 J	0.64	mg/kg	SW846 6010B
Cadmium	7.1	0.64	mg/kg	SW846 6010B
Chromium	20.3	1.3	mg/kg	SW846 6010B
Copper	718	3.2	mg/kg	SW846 6010B
Nickel	21.8	5.1	mg/kg	SW846 6010B
Silver	2.3	1.3	mg/kg	SW846 6010B
Zinc	2420	25.6	mg/kg	SW846 6010B
Percent Solids	78.1	10.0	%	MCAWW 160.3 MOD
S-070705-JH-005 07/07/05 005				
Arsenic	2.6	1.2	mg/kg	SW846 6010B
Lead	4.7	0.35	mg/kg	SW846 6010B
Beryllium	0.26 B,J	0.59	mg/kg	SW846 6010B
Cadmium	0.17 B	0.59	mg/kg	SW846 6010B
Chromium	5.8	1.2	mg/kg	SW846 6010B
Copper	5.8	2.9	mg/kg	SW846 6010B
Nickel	6.2	4.7	mg/kg	SW846 6010B
Zinc	23.4	2.4	mg/kg	SW846 6010B
Percent Solids	85.0	10.0	%	MCAWW 160.3 MOD
S-070705-JH-006 07/07/05 006				
Mercury	0.34	0.10	mg/kg	SW846 7471A
Arsenic	7.2	1.0	mg/kg	SW846 6010B
Lead	2700	15.6	mg/kg	SW846 6010B
Selenium	0.77	0.52	mg/kg	SW846 6010B
Antimony	12.7	6.2	mg/kg	SW846 6010B
Beryllium	2.0 J	0.52	mg/kg	SW846 6010B
Cadmium	14.2	0.52	mg/kg	SW846 6010B
Chromium	28.5	1.0	mg/kg	SW846 6010B
Copper	6510	130	mg/kg	SW846 6010B
Nickel	126	4.2	mg/kg	SW846 6010B
Silver	2.7	1.0	mg/kg	SW846 6010B
Zinc	15400	104	mg/kg	SW846 6010B
Percent Solids	96.1	10.0	%	MCAWW 160.3 MOD

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EXECUTIVE SUMMARY - Detection Highlights

A5G080236

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070705-JH-007 07/07/05 007				
Mercury	0.17 B	0.36	mg/kg	SW846 7471A
Arsenic	3.5 B	3.6	mg/kg	SW846 6010B
Lead	81.5	1.1	mg/kg	SW846 6010B
Antimony	4.6 B	21.9	mg/kg	SW846 6010B
Beryllium	0.34 B,J	1.8	mg/kg	SW846 6010B
Cadmium	0.44 B	1.8	mg/kg	SW846 6010B
Chromium	3.7	3.6	mg/kg	SW846 6010B
Copper	20.6	9.1	mg/kg	SW846 6010B
Nickel	3.4 B	14.6	mg/kg	SW846 6010B
Zinc	66.3	7.3	mg/kg	SW846 6010B
Percent Solids	27.4	10.0	%	MCAWW 160.3 MOD
S-070705-JH-008 07/07/05 008				
Arsenic	4.0	1.2	mg/kg	SW846 6010B
Lead	8.7	0.36	mg/kg	SW846 6010B
Beryllium	0.45 B,J	0.60	mg/kg	SW846 6010B
Cadmium	0.22 B	0.60	mg/kg	SW846 6010B
Chromium	10.0	1.2	mg/kg	SW846 6010B
Copper	18.8	3.0	mg/kg	SW846 6010B
Nickel	14.1	4.8	mg/kg	SW846 6010B
Zinc	35.2	2.4	mg/kg	SW846 6010B
Percent Solids	83.5	10.0	%	MCAWW 160.3 MOD
S-070705-JH-009 07/07/05 009				
Mercury	0.18	0.12	mg/kg	SW846 7471A
Arsenic	7.9	1.2	mg/kg	SW846 6010B
Lead	142	0.38	mg/kg	SW846 6010B
Antimony	1.4 B	7.5	mg/kg	SW846 6010B
Beryllium	0.91 J	0.62	mg/kg	SW846 6010B
Cadmium	1.5	0.62	mg/kg	SW846 6010B
Chromium	10.0	1.2	mg/kg	SW846 6010B
Copper	75.1	3.1	mg/kg	SW846 6010B
Nickel	13.3	5.0	mg/kg	SW846 6010B
Zinc	298	2.5	mg/kg	SW846 6010B
Percent Solids	80.0	10.0	%	MCAWW 160.3 MOD
S-070705-JH-010 07/07/05 010				
Mercury	0.019 B	0.12	mg/kg	SW846 7471A
Arsenic	4.2	1.2	mg/kg	SW846 6010B
Lead	27.3	0.37	mg/kg	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

A5G080236

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070705-JH-010 07/07/05 010				
Beryllium	0.39 B,J	0.61	mg/kg	SW846 6010B
Cadmium	0.46 B	0.61	mg/kg	SW846 6010B
Chromium	9.4	1.2	mg/kg	SW846 6010B
Copper	39.7	3.0	mg/kg	SW846 6010B
Nickel	12.1	4.9	mg/kg	SW846 6010B
Zinc	186	2.4	mg/kg	SW846 6010B
Percent Solids	82.0	10.0	%	MCAWW 160.3 MOD
S-070705-JH-011 07/07/05 011				
Mercury	1.5	0.12	mg/kg	SW846 7471A
Arsenic	10.2	1.2	mg/kg	SW846 6010B
Lead	1630	0.37	mg/kg	SW846 6010B
Selenium	1.6	0.62	mg/kg	SW846 6010B
Antimony	19.7	7.4	mg/kg	SW846 6010B
Beryllium	1.3 J	0.62	mg/kg	SW846 6010B
Cadmium	5.6	0.62	mg/kg	SW846 6010B
Chromium	20.4	1.2	mg/kg	SW846 6010B
Copper	5290	3.1	mg/kg	SW846 6010B
Nickel	63.7	4.9	mg/kg	SW846 6010B
Silver	1.9	1.2	mg/kg	SW846 6010B
Zinc	4890	24.6	mg/kg	SW846 6010B
Percent Solids	81.3	10.0	%	MCAWW 160.3 MOD
S-070705-JH-012 07/07/05 012				
Mercury	1.5	0.18	mg/kg	SW846 7471A
Arsenic	30.9	1.8	mg/kg	SW846 6010B
Lead	1270	0.54	mg/kg	SW846 6010B
Antimony	163	10.8	mg/kg	SW846 6010B
Beryllium	1.4 J	0.90	mg/kg	SW846 6010B
Cadmium	2.4	0.90	mg/kg	SW846 6010B
Chromium	13.4	1.8	mg/kg	SW846 6010B
Copper	79.3	4.5	mg/kg	SW846 6010B
Nickel	20.6	7.2	mg/kg	SW846 6010B
Zinc	365	3.6	mg/kg	SW846 6010B
Percent Solids	55.4	10.0	%	MCAWW 160.3 MOD
S-070705-JH-013 07/07/05 013				
Mercury	1.9	0.23	mg/kg	SW846 7471A
Arsenic	66.6	22.5	mg/kg	SW846 6010B
Lead	6530	6.8	mg/kg	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

A5G080236

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070705-JH-013 07/07/05 013				
Antimony	473	135	mg/kg	SW846 6010B
Beryllium	0.97 J	0.56	mg/kg	SW846 6010B
Cadmium	27.9	11.3	mg/kg	SW846 6010B
Chromium	80.9	1.1	mg/kg	SW846 6010B
Copper	10200	56.3	mg/kg	SW846 6010B
Nickel	114	4.5	mg/kg	SW846 6010B
Silver	34.0	1.1	mg/kg	SW846 6010B
Zinc	4470	45.1	mg/kg	SW846 6010B
Percent Solids	88.7	10.0	%	MCAWW 160.3 MOD
S-070705-JH-014 07/07/05 014				
Mercury	2.4	0.54	mg/kg	SW846 7471A
Arsenic	211	21.6	mg/kg	SW846 6010B
Lead	22800	6.5	mg/kg	SW846 6010B
Antimony	2330	130	mg/kg	SW846 6010B
Beryllium	1.2 J	0.54	mg/kg	SW846 6010B
Cadmium	27.9	10.8	mg/kg	SW846 6010B
Chromium	102	1.1	mg/kg	SW846 6010B
Copper	7090	54.0	mg/kg	SW846 6010B
Nickel	191	4.3	mg/kg	SW846 6010B
Silver	37.2	1.1	mg/kg	SW846 6010B
Zinc	6140	43.2	mg/kg	SW846 6010B
Percent Solids	92.6	10.0	%	MCAWW 160.3 MOD
S-070705-JH-015 07/07/05 015				
Mercury	1.4	0.12	mg/kg	SW846 7471A
Arsenic	11.7	1.2	mg/kg	SW846 6010B
Lead	8290	18.1	mg/kg	SW846 6010B
Thallium	0.75 B	1.2	mg/kg	SW846 6010B
Antimony	2.6 B	7.3	mg/kg	SW846 6010B
Beryllium	0.74 J	0.60	mg/kg	SW846 6010B
Cadmium	20.5	0.60	mg/kg	SW846 6010B
Chromium	995	1.2	mg/kg	SW846 6010B
Copper	352	3.0	mg/kg	SW846 6010B
Nickel	8.5	4.8	mg/kg	SW846 6010B
Zinc	30200	121	mg/kg	SW846 6010B
Percent Solids	82.7	10.0	%	MCAWW 160.3 MOD

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EXECUTIVE SUMMARY - Detection Highlights

A5G080236

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070705-JH-016 07/07/05 016				
Arsenic	4.3	1.2	mg/kg	SW846 6010B
Lead	51.6	0.35	mg/kg	SW846 6010B
Antimony	2.4 B	7.0	mg/kg	SW846 6010B
Beryllium	0.43 B,J	0.59	mg/kg	SW846 6010B
Cadmium	0.34 B	0.59	mg/kg	SW846 6010B
Chromium	10.1	1.2	mg/kg	SW846 6010B
Copper	21.8	2.9	mg/kg	SW846 6010B
Nickel	14.1	4.7	mg/kg	SW846 6010B
Zinc	55.8	2.3	mg/kg	SW846 6010B
Percent Solids	85.2	10.0	%	MCAWW 160.3 MOD
S-070705-JH-018 07/07/05 018				
Mercury	0.31	0.11	mg/kg	SW846 7471A
Arsenic	6.8	1.1	mg/kg	SW846 6010B
Lead	2120	16.0	mg/kg	SW846 6010B
Selenium	3.7	0.53	mg/kg	SW846 6010B
Antimony	7.3	6.4	mg/kg	SW846 6010B
Beryllium	2.4 J	0.53	mg/kg	SW846 6010B
Cadmium	16.7	0.53	mg/kg	SW846 6010B
Chromium	24.2	1.1	mg/kg	SW846 6010B
Copper	4510	2.7	mg/kg	SW846 6010B
Nickel	70.7	4.3	mg/kg	SW846 6010B
Silver	2.0	1.1	mg/kg	SW846 6010B
Zinc	10500	107	mg/kg	SW846 6010B
Percent Solids	93.5	10.0	%	MCAWW 160.3 MOD
S-070705-JH-019 07/07/05 019				
Mercury	0.59	0.11	mg/kg	SW846 7471A
Arsenic	10.8	1.1	mg/kg	SW846 6010B
Lead	2880	16.8	mg/kg	SW846 6010B
Selenium	2.4	0.56	mg/kg	SW846 6010B
Antimony	9.0	6.7	mg/kg	SW846 6010B
Beryllium	1.3 J	0.56	mg/kg	SW846 6010B
Cadmium	16.6	0.56	mg/kg	SW846 6010B
Chromium	44.1	1.1	mg/kg	SW846 6010B
Copper	3340	2.8	mg/kg	SW846 6010B
Nickel	110	4.5	mg/kg	SW846 6010B
Silver	2.5	1.1	mg/kg	SW846 6010B
Zinc	8960	112	mg/kg	SW846 6010B
Percent Solids	89.1	10.0	%	MCAWW 160.3 MOD

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EXECUTIVE SUMMARY - Detection Highlights

A5G080236

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070705-JH-020 07/07/05 020				
Arsenic	4.9	1.2	mg/kg	SW846 6010B
Lead	8.8 E	0.37	mg/kg	SW846 6010B
Beryllium	0.34 B,J	0.62	mg/kg	SW846 6010B
Cadmium	0.26 B	0.62	mg/kg	SW846 6010B
Chromium	7.9 E	1.2	mg/kg	SW846 6010B
Copper	13.0 E	3.1	mg/kg	SW846 6010B
Nickel	10.1 E	4.9	mg/kg	SW846 6010B
Zinc	36.5 E	2.5	mg/kg	SW846 6010B
Percent Solids	81.1	10.0	%	MCAWW 160.3 MOD
S-070705-JH-021 07/07/05 021				
Mercury	0.52	0.10	mg/kg	SW846 7471A
Arsenic	12.1	1.0	mg/kg	SW846 6010B
Lead	4460	1.5	mg/kg	SW846 6010B
Selenium	0.60	0.52	mg/kg	SW846 6010B
Antimony	32.9	6.2	mg/kg	SW846 6010B
Beryllium	2.6 J	0.52	mg/kg	SW846 6010B
Cadmium	26.7	0.52	mg/kg	SW846 6010B
Chromium	33.1	1.0	mg/kg	SW846 6010B
Copper	18800	12.9	mg/kg	SW846 6010B
Nickel	246	4.1	mg/kg	SW846 6010B
Silver	6.8	1.0	mg/kg	SW846 6010B
Zinc	16900	103	mg/kg	SW846 6010B
Percent Solids	96.9	10.0	%	MCAWW 160.3 MOD
S-070705-JH-022 07/07/05 022				
Mercury	0.025 B	0.15	mg/kg	SW846 7471A
Arsenic	17.5	1.5	mg/kg	SW846 6010B
Lead	347	0.45	mg/kg	SW846 6010B
Thallium	2.0	1.5	mg/kg	SW846 6010B
Antimony	3.4 B	9.0	mg/kg	SW846 6010B
Beryllium	1.5 J	0.75	mg/kg	SW846 6010B
Cadmium	11.3	0.75	mg/kg	SW846 6010B
Chromium	14.6	1.5	mg/kg	SW846 6010B
Copper	168 J	3.7	mg/kg	SW846 6010B
Nickel	48.3	6.0	mg/kg	SW846 6010B
Silver	1.2 B	1.5	mg/kg	SW846 6010B
Zinc	681 J	3.0	mg/kg	SW846 6010B
Percent Solids	66.9	10.0	%	MCAWW 160.3 MOD

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EXECUTIVE SUMMARY - Detection Highlights

A5G080236

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070705-JH-023 07/07/05 023				
Arsenic	3.6	1.2	mg/kg	SW846 6010B
Lead	9.1	0.36	mg/kg	SW846 6010B
Beryllium	0.34 B,J	0.60	mg/kg	SW846 6010B
Cadmium	0.29 B	0.60	mg/kg	SW846 6010B
Chromium	7.6	1.2	mg/kg	SW846 6010B
Copper	20.1 J	3.0	mg/kg	SW846 6010B
Nickel	9.5	4.8	mg/kg	SW846 6010B
Zinc	60.1 J	2.4	mg/kg	SW846 6010B
Percent Solids	83.9	10.0	%	MCAWW 160.3 MOD
S-070705-JH-024 07/07/05 024				
Mercury	0.87	0.11	mg/kg	SW846 7471A
Arsenic	18.5	1.1	mg/kg	SW846 6010B
Lead	4900	15.8	mg/kg	SW846 6010B
Selenium	0.93	0.53	mg/kg	SW846 6010B
Antimony	64.5	6.3	mg/kg	SW846 6010B
Beryllium	2.3 J	0.53	mg/kg	SW846 6010B
Cadmium	10.2	0.53	mg/kg	SW846 6010B
Chromium	35.6	1.1	mg/kg	SW846 6010B
Copper	73900 J	131	mg/kg	SW846 6010B
Nickel	2130	4.2	mg/kg	SW846 6010B
Silver	25.5	1.1	mg/kg	SW846 6010B
Zinc	7760 J	105	mg/kg	SW846 6010B
Percent Solids	95.1	10.0	%	MCAWW 160.3 MOD
S-070705-JH-025 07/07/05 025				
Mercury	0.65	0.11	mg/kg	SW846 7471A
Arsenic	6.5	1.1	mg/kg	SW846 6010B
Lead	122	0.34	mg/kg	SW846 6010B
Antimony	0.45 B	6.8	mg/kg	SW846 6010B
Beryllium	0.30 B,J	0.57	mg/kg	SW846 6010B
Cadmium	1.1	0.57	mg/kg	SW846 6010B
Chromium	7.0	1.1	mg/kg	SW846 6010B
Copper	149 J	2.8	mg/kg	SW846 6010B
Nickel	10.1	4.6	mg/kg	SW846 6010B
Zinc	415 J	2.3	mg/kg	SW846 6010B
Percent Solids	87.8	10.0	%	MCAWW 160.3 MOD

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EXECUTIVE SUMMARY - Detection Highlights

A5G080236

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070705-JH-026 07/07/05 026				
Arsenic	2.8	1.2	mg/kg	SW846 6010B
Lead	7.4	0.36	mg/kg	SW846 6010B
Beryllium	0.35 B,J	0.60	mg/kg	SW846 6010B
Cadmium	0.26 B	0.60	mg/kg	SW846 6010B
Chromium	7.3	1.2	mg/kg	SW846 6010B
Copper	15.6 J	3.0	mg/kg	SW846 6010B
Nickel	10.0	4.8	mg/kg	SW846 6010B
Zinc	30.5 J	2.4	mg/kg	SW846 6010B
Percent Solids	83.7	10.0	%	MCAWW 160.3 MOD
S-070705-JH-027 07/07/05 027				
Arsenic	1.7	1.1	mg/kg	SW846 6010B
Lead	54.6	0.32	mg/kg	SW846 6010B
Antimony	1.0 B	6.5	mg/kg	SW846 6010B
Beryllium	0.61 J	0.54	mg/kg	SW846 6010B
Cadmium	0.47 B	0.54	mg/kg	SW846 6010B
Chromium	12.3	1.1	mg/kg	SW846 6010B
Copper	201 J	2.7	mg/kg	SW846 6010B
Nickel	80.9	4.3	mg/kg	SW846 6010B
Zinc	257 J	2.2	mg/kg	SW846 6010B
Percent Solids	92.8	10.0	%	MCAWW 160.3 MOD
S-070705-JH-028 07/07/05 028				
Mercury	0.18	0.12	mg/kg	SW846 7471A
Arsenic	16.0	1.2	mg/kg	SW846 6010B
Lead	433	0.37	mg/kg	SW846 6010B
Antimony	3.5 B	7.3	mg/kg	SW846 6010B
Beryllium	1.4 J	0.61	mg/kg	SW846 6010B
Cadmium	3.1	0.61	mg/kg	SW846 6010B
Chromium	9.6	1.2	mg/kg	SW846 6010B
Copper	140 J	3.0	mg/kg	SW846 6010B
Nickel	17.0	4.9	mg/kg	SW846 6010B
Zinc	533 J	2.4	mg/kg	SW846 6010B
Percent Solids	82.1	10.0	%	MCAWW 160.3 MOD
S-070705-JH-029 07/07/05 029				
Arsenic	4.3	1.2	mg/kg	SW846 6010B
Lead	6.7	0.36	mg/kg	SW846 6010B
Beryllium	0.44 B,J	0.61	mg/kg	SW846 6010B
Cadmium	0.24 B	0.61	mg/kg	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A5G080236

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070705-JH-029 07/07/05 029				
Chromium	8.6	1.2	mg/kg	SW846 6010B
Copper	11.9 J	3.0	mg/kg	SW846 6010B
Nickel	12.0	4.9	mg/kg	SW846 6010B
Zinc	26.2 J	2.4	mg/kg	SW846 6010B
Percent Solids	82.3	10.0	%	MCAWW 160.3 MOD
S-070705-JH-030 07/07/05 030				
Mercury	0.11	0.10	mg/kg	SW846 7471A
Arsenic	1.1	1.0	mg/kg	SW846 6010B
Lead	243	0.31	mg/kg	SW846 6010B
Beryllium	0.31 B,J	0.52	mg/kg	SW846 6010B
Cadmium	2.0	0.52	mg/kg	SW846 6010B
Chromium	6.4	1.0	mg/kg	SW846 6010B
Copper	299 J	2.6	mg/kg	SW846 6010B
Nickel	10.4	4.1	mg/kg	SW846 6010B
Zinc	1120 J	10.4	mg/kg	SW846 6010B
Percent Solids	96.5	10.0	%	MCAWW 160.3 MOD
S-070705-JH-031 07/07/05 031				
Mercury	0.52	0.15	mg/kg	SW846 7471A
Arsenic	13.7	1.5	mg/kg	SW846 6010B
Lead	730	0.90	mg/kg	SW846 6010B
Antimony	8.5 B	9.0	mg/kg	SW846 6010B
Beryllium	0.85 J	0.75	mg/kg	SW846 6010B
Cadmium	9.0	0.75	mg/kg	SW846 6010B
Chromium	32.2	1.5	mg/kg	SW846 6010B
Copper	216 J	3.8	mg/kg	SW846 6010B
Nickel	28.7	6.0	mg/kg	SW846 6010B
Zinc	1060 J	3.0	mg/kg	SW846 6010B
Percent Solids	66.6	10.0	%	MCAWW 160.3 MOD
S-070705-JH-032 07/07/05 032				
Arsenic	3.8	1.2	mg/kg	SW846 6010B
Lead	6.0	0.35	mg/kg	SW846 6010B
Beryllium	0.35 B,J	0.59	mg/kg	SW846 6010B
Cadmium	0.27 B	0.59	mg/kg	SW846 6010B
Chromium	7.9	1.2	mg/kg	SW846 6010B
Copper	8.6 J	3.0	mg/kg	SW846 6010B
Nickel	8.5	4.7	mg/kg	SW846 6010B
Zinc	33.6 J	2.4	mg/kg	SW846 6010B

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A5G080236

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070705-JH-032 07/07/05 032				
Percent Solids	84.6	10.0	%	MCAWW 160.3 MOD
S-070705-JH-033 07/07/05 033				
Arsenic	1.5	1.1	mg/kg	SW846 6010B
Lead	9.4	0.33	mg/kg	SW846 6010B
Antimony	0.41 B	6.6	mg/kg	SW846 6010B
Beryllium	0.19 B,J	0.55	mg/kg	SW846 6010B
Cadmium	0.093 B	0.55	mg/kg	SW846 6010B
Chromium	2.7	1.1	mg/kg	SW846 6010B
Copper	5.7 J	2.8	mg/kg	SW846 6010B
Nickel	2.7 B	4.4	mg/kg	SW846 6010B
Zinc	20.8 J	2.2	mg/kg	SW846 6010B
Percent Solids	90.8	10.0	%	MCAWW 160.3 MOD
S-070705-JH-034 07/07/05 034				
Arsenic	4.9	1.2	mg/kg	SW846 6010B
Lead	10.5	0.35	mg/kg	SW846 6010B
Beryllium	0.55 B,J	0.58	mg/kg	SW846 6010B
Cadmium	0.38 B	0.58	mg/kg	SW846 6010B
Chromium	13.2	1.2	mg/kg	SW846 6010B
Copper	22.8 J	2.9	mg/kg	SW846 6010B
Nickel	22.6	4.6	mg/kg	SW846 6010B
Zinc	38.3 J	2.3	mg/kg	SW846 6010B
Percent Solids	86.2	10.0	%	MCAWW 160.3 MOD
S-070705-JH-035 07/07/05 035				
Mercury	0.13	0.11	mg/kg	SW846 7471A
Arsenic	2.7	1.1	mg/kg	SW846 6010B
Lead	394	0.32	mg/kg	SW846 6010B
Selenium	2.5	0.53	mg/kg	SW846 6010B
Beryllium	1.2 J	0.53	mg/kg	SW846 6010B
Cadmium	2.8	0.53	mg/kg	SW846 6010B
Chromium	33.0	1.1	mg/kg	SW846 6010B
Copper	5010 J	2.6	mg/kg	SW846 6010B
Nickel	28.8	4.2	mg/kg	SW846 6010B
Silver	0.64 B	1.1	mg/kg	SW846 6010B
Zinc	3270 J	21.1	mg/kg	SW846 6010B
Percent Solids	94.7	10.0	%	MCAWW 160.3 MOD

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EXECUTIVE SUMMARY - Detection Highlights

A5G080236

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070705-JH-036 07/07/05 036				
Mercury	0.62	0.10	mg/kg	SW846 7471A
Arsenic	3.2	1.0	mg/kg	SW846 6010B
Lead	319	0.31	mg/kg	SW846 6010B
Selenium	2.5	0.52	mg/kg	SW846 6010B
Antimony	0.54 B	6.3	mg/kg	SW846 6010B
Beryllium	0.95 J	0.52	mg/kg	SW846 6010B
Cadmium	2.0	0.52	mg/kg	SW846 6010B
Chromium	18.3	1.0	mg/kg	SW846 6010B
Copper	1610 J	2.6	mg/kg	SW846 6010B
Nickel	15.8	4.2	mg/kg	SW846 6010B
Silver	0.52 B	1.0	mg/kg	SW846 6010B
Zinc	1180 J	21.0	mg/kg	SW846 6010B
Percent Solids	95.5	10.0	%	MCAWW 160.3 MOD
S-070705-JH-037 07/07/05 037				
Mercury	0.37	0.12	mg/kg	SW846 7471A
Arsenic	6.8	1.2	mg/kg	SW846 6010B
Lead	192	0.37	mg/kg	SW846 6010B
Beryllium	0.79 J	0.62	mg/kg	SW846 6010B
Cadmium	0.81	0.62	mg/kg	SW846 6010B
Chromium	13.4	1.2	mg/kg	SW846 6010B
Copper	29.2 J	3.1	mg/kg	SW846 6010B
Nickel	16.2	4.9	mg/kg	SW846 6010B
Zinc	140 J	2.5	mg/kg	SW846 6010B
Percent Solids	81.1	10.0	%	MCAWW 160.3 MOD
S-070705-JH-038 07/07/05 038				
Mercury	0.018 B	0.12	mg/kg	SW846 7471A
Arsenic	3.4	1.2	mg/kg	SW846 6010B
Lead	10.4	0.37	mg/kg	SW846 6010B
Beryllium	0.48 B,J	0.62	mg/kg	SW846 6010B
Cadmium	0.26 B	0.62	mg/kg	SW846 6010B
Chromium	9.8	1.2	mg/kg	SW846 6010B
Copper	16.3 J	3.1	mg/kg	SW846 6010B
Nickel	13.9	5.0	mg/kg	SW846 6010B
Zinc	41.1 J	2.5	mg/kg	SW846 6010B
Percent Solids	80.3	10.0	%	MCAWW 160.3 MOD

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A5G080236

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070705-JH-040 07/07/05 040				
Mercury	0.94	0.10	mg/kg	SW846 7471A
Arsenic	5.0	1.0	mg/kg	SW846 6010B
Lead	4540	15.5	mg/kg	SW846 6010B
Selenium	27.8	0.52	mg/kg	SW846 6010B
Antimony	22.2	6.2	mg/kg	SW846 6010B
Beryllium	6.3 J	0.52	mg/kg	SW846 6010B
Cadmium	13.2	0.52	mg/kg	SW846 6010B
Chromium	153	1.0	mg/kg	SW846 6010B
Copper	27000 J	130	mg/kg	SW846 6010B
Nickel	196	4.1	mg/kg	SW846 6010B
Silver	8.1	1.0	mg/kg	SW846 6010B
Zinc	12100 J	104	mg/kg	SW846 6010B
Percent Solids	96.5	10.0	%	MCAWW 160.3 MOD
S-070705-JH-041 07/07/05 041				
Mercury	0.55	0.12	mg/kg	SW846 7471A
Arsenic	5.9	1.2	mg/kg	SW846 6010B
Lead	95.7	0.35	mg/kg	SW846 6010B
Selenium	15.6	0.58	mg/kg	SW846 6010B
Thallium	1.2	1.2	mg/kg	SW846 6010B
Antimony	1.1 B	7.0	mg/kg	SW846 6010B
Beryllium	0.54 B,J	0.58	mg/kg	SW846 6010B
Cadmium	0.70	0.58	mg/kg	SW846 6010B
Chromium	8.0	1.2	mg/kg	SW846 6010B
Copper	44.3 J	2.9	mg/kg	SW846 6010B
Nickel	6.5	4.7	mg/kg	SW846 6010B
Zinc	79.7 J	2.3	mg/kg	SW846 6010B
Percent Solids	85.8	10.0	%	MCAWW 160.3 MOD
S-070705-JH-044 07/07/05 042				
Mercury	0.59	0.11	mg/kg	SW846 7471A
Arsenic	3.8	1.1	mg/kg	SW846 6010B
Lead	664	0.34	mg/kg	SW846 6010B
Selenium	0.37 B	0.57	mg/kg	SW846 6010B
Antimony	0.57 B	6.9	mg/kg	SW846 6010B
Beryllium	0.69 J,E	0.57	mg/kg	SW846 6010B
Cadmium	0.46 B	0.57	mg/kg	SW846 6010B
Chromium	11.3	1.1	mg/kg	SW846 6010B
Copper	36.2 J	2.9	mg/kg	SW846 6010B
Nickel	9.4	4.6	mg/kg	SW846 6010B
Zinc	37.6 J	2.3	mg/kg	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

A5G080236

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070705-JH-044 07/07/05 042				
Percent Solids	87.0	10.0	%	MCAWW 160.3 MOD
S-070705-JH-045 07/07/05 043				
Arsenic	6.0	1.2	mg/kg	SW846 6010B
Lead	6.1	0.36	mg/kg	SW846 6010B
Beryllium	0.26 B,J	0.60	mg/kg	SW846 6010B
Cadmium	0.29 B	0.60	mg/kg	SW846 6010B
Chromium	7.1	1.2	mg/kg	SW846 6010B
Copper	7.8	3.0	mg/kg	SW846 6010B
Nickel	8.7	4.8	mg/kg	SW846 6010B
Zinc	26.8	2.4	mg/kg	SW846 6010B
Percent Solids	83.5	10.0	%	MCAWW 160.3 MOD
S-070705-JH-046 07/07/05 044				
Mercury	0.14	0.10	mg/kg	SW846 7471A
Arsenic	3.3	1.0	mg/kg	SW846 6010B
Lead	1410	0.31	mg/kg	SW846 6010B
Selenium	5.3	0.52	mg/kg	SW846 6010B
Antimony	1.1 B	6.3	mg/kg	SW846 6010B
Beryllium	2.5 J	0.52	mg/kg	SW846 6010B
Cadmium	7.1	0.52	mg/kg	SW846 6010B
Chromium	23.1	1.0	mg/kg	SW846 6010B
Copper	3410	2.6	mg/kg	SW846 6010B
Nickel	36.5	4.2	mg/kg	SW846 6010B
Silver	1.1	1.0	mg/kg	SW846 6010B
Zinc	5160	20.9	mg/kg	SW846 6010B
Percent Solids	95.5	10.0	%	MCAWW 160.3 MOD
S-070705-JH-047 07/07/05 045				
Mercury	0.73	0.13	mg/kg	SW846 7471A
Arsenic	31.1	1.3	mg/kg	SW846 6010B
Lead	525	0.79	mg/kg	SW846 6010B
Selenium	10.4	1.3	mg/kg	SW846 6010B
Antimony	6.0 B	7.9	mg/kg	SW846 6010B
Beryllium	1.0 J	0.65	mg/kg	SW846 6010B
Cadmium	5.8	0.65	mg/kg	SW846 6010B
Chromium	21.4	1.3	mg/kg	SW846 6010B
Copper	420	3.3	mg/kg	SW846 6010B
Nickel	42.8	5.2	mg/kg	SW846 6010B
Zinc	1710	5.2	mg/kg	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

A5G080236

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070705-JH-047 07/07/05 045				
Percent Solids	76.4	10.0	%	MCAWW 160.3 MOD
S-070705-JH-048 07/07/05 046				
Arsenic	3.3	1.2	mg/kg	SW846 6010B
Lead	6.1	0.37	mg/kg	SW846 6010B
Beryllium	0.27 B,J	0.62	mg/kg	SW846 6010B
Cadmium	0.23 B	0.62	mg/kg	SW846 6010B
Chromium	7.7	1.2	mg/kg	SW846 6010B
Copper	10	3.1	mg/kg	SW846 6010B
Nickel	8.5	5.0	mg/kg	SW846 6010B
Zinc	30.1	2.5	mg/kg	SW846 6010B
Percent Solids	80.4	10.0	%	MCAWW 160.3 MOD
S-070705-JH-049 07/07/05 047				
Mercury	0.080 B	0.11	mg/kg	SW846 7471A
Arsenic	15.1	1.1	mg/kg	SW846 6010B
Lead	44.2	0.33	mg/kg	SW846 6010B
Beryllium	0.73 J	0.55	mg/kg	SW846 6010B
Cadmium	1.4	0.55	mg/kg	SW846 6010B
Chromium	16.4	1.1	mg/kg	SW846 6010B
Copper	33.3	2.7	mg/kg	SW846 6010B
Nickel	19.5	4.4	mg/kg	SW846 6010B
Zinc	139	2.2	mg/kg	SW846 6010B
Percent Solids	91.4	10.0	%	MCAWW 160.3 MOD
S-070705-JH-050 07/07/05 048				
Mercury	0.14	0.11	mg/kg	SW846 7471A
Arsenic	25.8	1.1	mg/kg	SW846 6010B
Lead	153	0.32	mg/kg	SW846 6010B
Antimony	4.1 B	6.4	mg/kg	SW846 6010B
Beryllium	0.63 J	0.53	mg/kg	SW846 6010B
Cadmium	1.7	0.53	mg/kg	SW846 6010B
Chromium	20.3	1.1	mg/kg	SW846 6010B
Copper	178	2.7	mg/kg	SW846 6010B
Nickel	28.0	4.3	mg/kg	SW846 6010B
Silver	0.48 B	1.1	mg/kg	SW846 6010B
Zinc	1040	2.1	mg/kg	SW846 6010B
Percent Solids	93.6	10.0	%	MCAWW 160.3 MOD

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EXECUTIVE SUMMARY - Detection Highlights

A5G080236

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070705-JH-042 07/07/05 049				
Arsenic	6.3	1.2	mg/kg	SW846 6010B
Lead	12.9	0.36	mg/kg	SW846 6010B
Beryllium	0.53 B,J	0.60	mg/kg	SW846 6010B
Cadmium	0.23 B	0.60	mg/kg	SW846 6010B
Chromium	13.9	1.2	mg/kg	SW846 6010B
Copper	17.4	3.0	mg/kg	SW846 6010B
Nickel	20.1	4.8	mg/kg	SW846 6010B
Zinc	38.9	2.4	mg/kg	SW846 6010B
Percent Solids	83.8	10.0	%	MCAWW 160.3 MOD
S-070705-JH-043 07/07/05 050				
Arsenic	2.1	1.0	mg/kg	SW846 6010B
Lead	242	1.5	mg/kg	SW846 6010B
Selenium	0.62	0.52	mg/kg	SW846 6010B
Antimony	0.46 B	6.2	mg/kg	SW846 6010B
Beryllium	1.1 J	0.52	mg/kg	SW846 6010B
Cadmium	1.3	0.52	mg/kg	SW846 6010B
Chromium	13.6	1.0	mg/kg	SW846 6010B
Copper	13400	12.9	mg/kg	SW846 6010B
Nickel	18.5	4.1	mg/kg	SW846 6010B
Silver	0.97 B	1.0	mg/kg	SW846 6010B
Zinc	1180	10.3	mg/kg	SW846 6010B
Percent Solids	96.9	10.0	%	MCAWW 160.3 MOD

ANALYTICAL METHODS SUMMARY

A5G080236

PARAMETER	ANALYTICAL METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A
Total Residue as Percent Solids	MCAWW 160.3 MOD
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A5G080236

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
HE4J8	001	S-070705-JH-001	07/07/05	
HE4K5	002	S-070705-JH-002	07/07/05	
HE4K7	003	S-070705-JH-003	07/07/05	
HE4K8	004	S-070705-JH-004	07/07/05	
HE4K9	005	S-070705-JH-005	07/07/05	
HE4LC	006	S-070705-JH-006	07/07/05	
HE4LF	007	S-070705-JH-007	07/07/05	
HE4LH	008	S-070705-JH-008	07/07/05	
HE4LK	009	S-070705-JH-009	07/07/05	
HE4LL	010	S-070705-JH-010	07/07/05	
HE4LN	011	S-070705-JH-011	07/07/05	
HE4LR	012	S-070705-JH-012	07/07/05	
HE4LW	013	S-070705-JH-013	07/07/05	
HE4LX	014	S-070705-JH-014	07/07/05	
HE4L0	015	S-070705-JH-015	07/07/05	
HE4L2	016	S-070705-JH-016	07/07/05	
HE4L4	017	W-070705-JH-017	07/07/05	
HE4MC	018	S-070705-JH-018	07/07/05	
HE4MK	019	S-070705-JH-019	07/07/05	
MN	020	S-070705-JH-020	07/07/05	
R	021	S-070705-JH-021	07/07/05	
...4MT	022	S-070705-JH-022	07/07/05	
HE4M0	023	S-070705-JH-023	07/07/05	
HE4M2	024	S-070705-JH-024	07/07/05	
HE4M3	025	S-070705-JH-025	07/07/05	
HE4M4	026	S-070705-JH-026	07/07/05	
HE4M5	027	S-070705-JH-027	07/07/05	
HE4M6	028	S-070705-JH-028	07/07/05	
HE4M8	029	S-070705-JH-029	07/07/05	
HE4M9	030	S-070705-JH-030	07/07/05	
HE4NC	031	S-070705-JH-031	07/07/05	
HE4ND	032	S-070705-JH-032	07/07/05	
HE4NE	033	S-070705-JH-033	07/07/05	
HE4NF	034	S-070705-JH-034	07/07/05	
HE4NH	035	S-070705-JH-035	07/07/05	
HE4NK	036	S-070705-JH-036	07/07/05	

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SAMPLE SUMMARY

A5G080236

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
HE4NM	037	S-070705-JH-037	07/07/05	
HE4NN	038	S-070705-JH-038	07/07/05	
HE4NQ	039	W-070705-JH-039	07/07/05	
HE4N1	040	S-070705-JH-040	07/07/05	
HE4PE	041	S-070705-JH-041	07/07/05	
HE4PG	042	S-070705-JH-044	07/07/05	
HE4PM	043	S-070705-JH-045	07/07/05	
HE4PT	044	S-070705-JH-046	07/07/05	
HE4PV	045	S-070705-JH-047	07/07/05	
HE4PW	046	S-070705-JH-048	07/07/05	
HE4PX	047	S-070705-JH-049	07/07/05	
HE4P0	048	S-070705-JH-050	07/07/05	
HE445	049	S-070705-JH-042	07/07/05	
HE447	050	S-070705-JH-043	07/07/05	

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-001

TOTAL Metals

Lot-Sample #...: A5G080236-001 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 38

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199035						
Arsenic	3.6	1.6	mg/kg	SW846 6010B	07/18/05	HE4J81AL
		Dilution Factor: 1				
Antimony	1.3 B	9.6	mg/kg	SW846 6010B	07/18/05	HE4J81AC
		Dilution Factor: 1				
Beryllium	0.53 B,J	0.80	mg/kg	SW846 6010B	07/18/05	HE4J81AD
		Dilution Factor: 1				
Lead	158	0.48	mg/kg	SW846 6010B	07/18/05	HE4J81AM
		Dilution Factor: 1				
Cadmium	0.74 B	0.80	mg/kg	SW846 6010B	07/18/05	HE4J81AE
		Dilution Factor: 1				
enium	5.8	0.80	mg/kg	SW846 6010B	07/18/05	HE4J81AN
		Dilution Factor: 1				
Chromium	9.1	1.6	mg/kg	SW846 6010B	07/18/05	HE4J81AF
		Dilution Factor: 1				
Thallium	0.86 B	1.6	mg/kg	SW846 6010B	07/18/05	HE4J81AP
		Dilution Factor: 1				
Copper	36.5	4.0	mg/kg	SW846 6010B	07/18/05	HE4J81AG
		Dilution Factor: 1				
Nickel	12.1	6.4	mg/kg	SW846 6010B	07/18/05	HE4J81AH
		Dilution Factor: 1				
Silver	ND	1.6	mg/kg	SW846 6010B	07/18/05	HE4J81AJ
		Dilution Factor: 1				
Zinc	636	3.2	mg/kg	SW846 6010B	07/18/05	HE4J81AK
		Dilution Factor: 1				
Mercury	0.34	0.16	mg/kg	SW846 7471A	07/18/05	HE4J81AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ated result. Result is less than RL.

d blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-001

General Chemistry

Lot-Sample #...: A5G080236-001 Work Order #...: HE4J8 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 38

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	62.5	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189400

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-002

TOTAL Metals

Lot-Sample #...: A5G080236-002 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199035						
Arsenic	3.8	1.2	mg/kg	SW846 6010B	07/18/05	HE4K51AL
		Dilution Factor: 1				
Antimony	ND	7.5	mg/kg	SW846 6010B	07/18/05	HE4K51AC
		Dilution Factor: 1				
Beryllium	0.36 B,J	0.62	mg/kg	SW846 6010B	07/18/05	HE4K51AD
		Dilution Factor: 1				
Lead	13.8	0.37	mg/kg	SW846 6010B	07/18/05	HE4K51AM
		Dilution Factor: 1				
Cadmium	0.26 B	0.62	mg/kg	SW846 6010B	07/18/05	HE4K51AE
		Dilution Factor: 1				
enium	ND	0.62	mg/kg	SW846 6010B	07/18/05	HE4K51AN
		Dilution Factor: 1				
Chromium	7.9	1.2	mg/kg	SW846 6010B	07/18/05	HE4K51AF
		Dilution Factor: 1				
Thallium	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4K51AP
		Dilution Factor: 1				
Copper	11.8	3.1	mg/kg	SW846 6010B	07/18/05	HE4K51AG
		Dilution Factor: 1				
Nickel	10.5	5.0	mg/kg	SW846 6010B	07/18/05	HE4K51AH
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4K51AJ
		Dilution Factor: 1				
Zinc	70.2	2.5	mg/kg	SW846 6010B	07/18/05	HE4K51AK
		Dilution Factor: 1				
Mercury	ND	0.12	mg/kg	SW846 7471A	07/18/05	HE4K51AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

imated result. Result is less than RL.

hod blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-002

General Chemistry

Lot-Sample #...: A5G080236-002 Work Order #...: HE4K5 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 20

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	80.1	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189400

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-003

TOTAL Metals

Lot-Sample #...: A5G080236-003 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 2.2

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199035						
Arsenic	1.8	1.0	mg/kg	SW846 6010B	07/18/05	HE4K71AL
		Dilution Factor: 1				
Antimony	1.3 B	6.1	mg/kg	SW846 6010B	07/18/05	HE4K71AC
		Dilution Factor: 1				
Beryllium	0.27 B,J	0.51	mg/kg	SW846 6010B	07/18/05	HE4K71AD
		Dilution Factor: 1				
Lead	532	0.31	mg/kg	SW846 6010B	07/18/05	HE4K71AM
		Dilution Factor: 1				
Cadmium	1.8	0.51	mg/kg	SW846 6010B	07/18/05	HE4K71AE
		Dilution Factor: 1				
enium	ND	0.51	mg/kg	SW846 6010B	07/18/05	HE4K71AN
		Dilution Factor: 1				
Chromium	13.6	1.0	mg/kg	SW846 6010B	07/18/05	HE4K71AF
		Dilution Factor: 1				
Thallium	0.58 B	1.0	mg/kg	SW846 6010B	07/18/05	HE4K71AP
		Dilution Factor: 1				
Copper	4690	2.6	mg/kg	SW846 6010B	07/18/05	HE4K71AG
		Dilution Factor: 1				
Nickel	55.6	4.1	mg/kg	SW846 6010B	07/18/05	HE4K71AH
		Dilution Factor: 1				
Silver	1.5	1.0	mg/kg	SW846 6010B	07/18/05	HE4K71AJ
		Dilution Factor: 1				
Zinc	3140	20.5	mg/kg	SW846 6010B	07/18-07/19/05	HE4K71AK
		Dilution Factor: 10				
Mercury	0.030 B	0.10	mg/kg	SW846 7471A	07/18/05	HE4K71AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

imated result. Result is less than RL.

hod blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-003

General Chemistry

Lot-Sample #...: A5G080236-003 Work Order #...: HE4K7 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 2.2

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	97.8	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189400

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-004

TOTAL Metals

Lot-Sample #...: A5G080236-004 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 22

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199035						
Arsenic	67.0	1.3	mg/kg	SW846 6010B	07/18/05	HE4K81AL
		Dilution Factor: 1				
Antimony	3.5 B	7.7	mg/kg	SW846 6010B	07/18/05	HE4K81AC
		Dilution Factor: 1				
Beryllium	1.2 J	0.64	mg/kg	SW846 6010B	07/18/05	HE4K81AD
		Dilution Factor: 1				
Lead	1280	0.38	mg/kg	SW846 6010B	07/18/05	HE4K81AM
		Dilution Factor: 1				
Cadmium	7.1	0.64	mg/kg	SW846 6010B	07/18/05	HE4K81AE
		Dilution Factor: 1				
enium	1.6	0.64	mg/kg	SW846 6010B	07/18/05	HE4K81AN
		Dilution Factor: 1				
Chromium	20.3	1.3	mg/kg	SW846 6010B	07/18/05	HE4K81AF
		Dilution Factor: 1				
Thallium	ND	1.3	mg/kg	SW846 6010B	07/18/05	HE4K81AP
		Dilution Factor: 1				
Copper	718	3.2	mg/kg	SW846 6010B	07/18/05	HE4K81AG
		Dilution Factor: 1				
Nickel	21.8	5.1	mg/kg	SW846 6010B	07/18/05	HE4K81AH
		Dilution Factor: 1				
Silver	2.3	1.3	mg/kg	SW846 6010B	07/18/05	HE4K81AJ
		Dilution Factor: 1				
Zinc	2420	25.6	mg/kg	SW846 6010B	07/18-07/19/05	HE4K81AK
		Dilution Factor: 10				
Mercury	1.6	0.13	mg/kg	SW846 7471A	07/18/05	HE4K81AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

imated result. Result is less than RL.

pd blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-004

General Chemistry

Lot-Sample #...: A5G080236-004 Work Order #...: HE4K8 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 22

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	78.1	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189400

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-005

TOTAL Metals

Lot-Sample #...: A5G080236-005 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199035						
Arsenic	2.6	1.2	mg/kg	SW846 6010B	07/18/05	HE4K91AL
		Dilution Factor: 1				
Antimony	ND	7.1	mg/kg	SW846 6010B	07/18/05	HE4K91AC
		Dilution Factor: 1				
Beryllium	0.26 B,J	0.59	mg/kg	SW846 6010B	07/18/05	HE4K91AD
		Dilution Factor: 1				
Lead	4.7	0.35	mg/kg	SW846 6010B	07/18/05	HE4K91AM
		Dilution Factor: 1				
Cadmium	0.17 B	0.59	mg/kg	SW846 6010B	07/18/05	HE4K91AE
		Dilution Factor: 1				
enium	ND	0.59	mg/kg	SW846 6010B	07/18/05	HE4K91AN
		Dilution Factor: 1				
Chromium	5.8	1.2	mg/kg	SW846 6010B	07/18/05	HE4K91AF
		Dilution Factor: 1				
Thallium	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4K91AP
		Dilution Factor: 1				
Copper	5.8	2.9	mg/kg	SW846 6010B	07/18/05	HE4K91AG
		Dilution Factor: 1				
Nickel	6.2	4.7	mg/kg	SW846 6010B	07/18/05	HE4K91AH
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4K91AJ
		Dilution Factor: 1				
Zinc	23.4	2.4	mg/kg	SW846 6010B	07/18/05	HE4K91AK
		Dilution Factor: 1				
Mercury	ND	0.12	mg/kg	SW846 7471A	07/18/05	HE4K91AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

'mated result. Result is less than RL.

hod blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-005

General Chemistry

Lot-Sample #...: A5G080236-005 Work Order #...: HE4K9 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	85.0	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189400

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JB-006

TOTAL Metals

Lot-Sample #...: A5G080236-006 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 3.9

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199035						
Arsenic	7.2	1.0	mg/kg	SW846 6010B	07/18/05	HE4LC1AL
		Dilution Factor: 1				
Antimony	12.7	6.2	mg/kg	SW846 6010B	07/18/05	HE4LC1AC
		Dilution Factor: 1				
Beryllium	2.0 J	0.52	mg/kg	SW846 6010B	07/18/05	HE4LC1AD
		Dilution Factor: 1				
Lead	2700	15.6	mg/kg	SW846 6010B	07/18-07/19/05	HE4LC1AM
		Dilution Factor: 50				
Cadmium	14.2	0.52	mg/kg	SW846 6010B	07/18/05	HE4LC1AE
		Dilution Factor: 1				
enium	0.77	0.52	mg/kg	SW846 6010B	07/18/05	HE4LC1AN
		Dilution Factor: 1				
Chromium	28.5	1.0	mg/kg	SW846 6010B	07/18/05	HE4LC1AF
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18/05	HE4LC1AP
		Dilution Factor: 1				
Copper	6510	130	mg/kg	SW846 6010B	07/18-07/19/05	HE4LC1AG
		Dilution Factor: 50				
Nickel	126	4.2	mg/kg	SW846 6010B	07/18/05	HE4LC1AH
		Dilution Factor: 1				
Silver	2.7	1.0	mg/kg	SW846 6010B	07/18/05	HE4LC1AJ
		Dilution Factor: 1				
Zinc	15400	104	mg/kg	SW846 6010B	07/18-07/19/05	HE4LC1AK
		Dilution Factor: 50				
Mercury	0.34	0.10	mg/kg	SW846 7471A	07/18/05	HE4LC1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

hod blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-006

General Chemistry

Lot-Sample #...: A5G080236-006 Work Order #...: HE4LC Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 3.9

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	96.1	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189400

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-007

TOTAL Metals

Lot-Sample #...: A5G080236-007 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 73

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199035						
Arsenic	3.5 B	3.6	mg/kg	SW846 6010B	07/18/05	HE4LF1AL
		Dilution Factor: 1				
Antimony	4.6 B	21.9	mg/kg	SW846 6010B	07/18/05	HE4LF1AC
		Dilution Factor: 1				
Beryllium	0.34 B,J	1.8	mg/kg	SW846 6010B	07/18/05	HE4LF1AD
		Dilution Factor: 1				
Lead	81.5	1.1	mg/kg	SW846 6010B	07/18/05	HE4LF1AM
		Dilution Factor: 1				
Cadmium	0.44 B	1.8	mg/kg	SW846 6010B	07/18/05	HE4LF1AE
		Dilution Factor: 1				
lenium	ND	1.8	mg/kg	SW846 6010B	07/18/05	HE4LF1AN
		Dilution Factor: 1				
Chromium	3.7	3.6	mg/kg	SW846 6010B	07/18/05	HE4LF1AF
		Dilution Factor: 1				
Thallium	ND	3.6	mg/kg	SW846 6010B	07/18/05	HE4LF1AP
		Dilution Factor: 1				
Copper	20.6	9.1	mg/kg	SW846 6010B	07/18/05	HE4LF1AG
		Dilution Factor: 1				
Nickel	3.4 B	14.6	mg/kg	SW846 6010B	07/18/05	HE4LF1AH
		Dilution Factor: 1				
Silver	ND	3.6	mg/kg	SW846 6010B	07/18/05	HE4LF1AJ
		Dilution Factor: 1				
Zinc	66.3	7.3	mg/kg	SW846 6010B	07/18/05	HE4LF1AK
		Dilution Factor: 1				
Mercury	0.17 B	0.36	mg/kg	SW846 7471A	07/18/05	HE4LF1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

imated result. Result is less than RL.

hod blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-007

General Chemistry

Lot-Sample #...: A5G080236-007 Work Order #...: HE4LF Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 73

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	27.4	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189400

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-008

TOTAL Metals

Lot-Sample #...: A5G080236-008 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 16

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199035						
Arsenic	4.0	1.2	mg/kg	SW846 6010B	07/18/05	HE4LH1AL
		Dilution Factor: 1				
Antimony	ND	7.2	mg/kg	SW846 6010B	07/18/05	HE4LH1AC
		Dilution Factor: 1				
Beryllium	0.45 B,J	0.60	mg/kg	SW846 6010B	07/18/05	HE4LH1AD
		Dilution Factor: 1				
Lead	8.7	0.36	mg/kg	SW846 6010B	07/18/05	HE4LH1AM
		Dilution Factor: 1				
Cadmium	0.22 B	0.60	mg/kg	SW846 6010B	07/18/05	HE4LH1AE
		Dilution Factor: 1				
enium	ND	0.60	mg/kg	SW846 6010B	07/18/05	HE4LH1AN
		Dilution Factor: 1				
Chromium	10.0	1.2	mg/kg	SW846 6010B	07/18/05	HE4LH1AF
		Dilution Factor: 1				
Thallium	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4LH1AP
		Dilution Factor: 1				
Copper	18.8	3.0	mg/kg	SW846 6010B	07/18/05	HE4LH1AG
		Dilution Factor: 1				
Nickel	14.1	4.8	mg/kg	SW846 6010B	07/18/05	HE4LH1AH
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4LH1AJ
		Dilution Factor: 1				
Zinc	35.2	2.4	mg/kg	SW846 6010B	07/18/05	HE4LH1AK
		Dilution Factor: 1				
Mercury	ND	0.12	mg/kg	SW846 7471A	07/18/05	HE4LH1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

imated result. Result is less than RL.

od blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-008

General Chemistry

Lot-Sample #...: A5G080236-008 Work Order #...: HE4LH Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 16

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	83.5	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189400

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-009

TOTAL Metals

Lot-Sample #...: A5G080236-009 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199035						
Arsenic	7.9	1.2	mg/kg	SW846 6010B	07/18/05	HE4LK1AL
		Dilution Factor: 1				
Antimony	1.4 B	7.5	mg/kg	SW846 6010B	07/18/05	HE4LK1AC
		Dilution Factor: 1				
Beryllium	0.91 J	0.62	mg/kg	SW846 6010B	07/18/05	HE4LK1AD
		Dilution Factor: 1				
Lead	142	0.38	mg/kg	SW846 6010B	07/18/05	HE4LK1AM
		Dilution Factor: 1				
Cadmium	1.5	0.62	mg/kg	SW846 6010B	07/18/05	HE4LK1AE
		Dilution Factor: 1				
enium	ND	0.62	mg/kg	SW846 6010B	07/18/05	HE4LK1AN
		Dilution Factor: 1				
Chromium	10.0	1.2	mg/kg	SW846 6010B	07/18/05	HE4LK1AF
		Dilution Factor: 1				
Thallium	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4LK1AP
		Dilution Factor: 1				
Copper	75.1	3.1	mg/kg	SW846 6010B	07/18/05	HE4LK1AG
		Dilution Factor: 1				
Nickel	13.3	5.0	mg/kg	SW846 6010B	07/18/05	HE4LK1AH
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4LK1AJ
		Dilution Factor: 1				
Zinc	298	2.5	mg/kg	SW846 6010B	07/18/05	HE4LK1AK
		Dilution Factor: 1				
Mercury	0.18	0.12	mg/kg	SW846 7471A	07/18/05	HE4LK1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

imated result. Result is less than RL.

od blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-009

General Chemistry

Lot-Sample #...: A5G080236-009 Work Order #...: HE4LK Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 20

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	80.0	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189400

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-010

TOTAL Metals

Lot-Sample #...: A5G080236-010 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 18

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199035						
Arsenic	4.2	1.2	mg/kg	SW846 6010B	07/18/05	HE4LL1AL
		Dilution Factor: 1				
Antimony	ND	7.3	mg/kg	SW846 6010B	07/18/05	HE4LL1AC
		Dilution Factor: 1				
Beryllium	0.39 B,J	0.61	mg/kg	SW846 6010B	07/18/05	HE4LL1AD
		Dilution Factor: 1				
Lead	27.3	0.37	mg/kg	SW846 6010B	07/18/05	HE4LL1AM
		Dilution Factor: 1				
Cadmium	0.46 B	0.61	mg/kg	SW846 6010B	07/18/05	HE4LL1AE
		Dilution Factor: 1				
enium	ND	0.61	mg/kg	SW846 6010B	07/18/05	HE4LL1AN
		Dilution Factor: 1				
Chromium	9.4	1.2	mg/kg	SW846 6010B	07/18/05	HE4LL1AF
		Dilution Factor: 1				
Thallium	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4LL1AP
		Dilution Factor: 1				
Copper	39.7	3.0	mg/kg	SW846 6010B	07/18/05	HE4LL1AG
		Dilution Factor: 1				
Nickel	12.1	4.9	mg/kg	SW846 6010B	07/18/05	HE4LL1AH
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4LL1AJ
		Dilution Factor: 1				
Zinc	186	2.4	mg/kg	SW846 6010B	07/18/05	HE4LL1AK
		Dilution Factor: 1				
Mercury	0.019 B	0.12	mg/kg	SW846 7471A	07/18/05	HE4LL1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ated result. Result is less than RL.

d blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-010

General Chemistry

Lot-Sample #...: A5G080236-010 Work Order #...: HE4LL Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 18

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	82.0	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189400

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-011

TOTAL Metals

Lot-Sample #...: A5G080236-011 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 19

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199035						
Arsenic	10.2	1.2	mg/kg	SW846 6010B	07/18/05	HE4LN1AL
		Dilution Factor: 1				
Antimony	19.7	7.4	mg/kg	SW846 6010B	07/18/05	HE4LN1AC
		Dilution Factor: 1				
Beryllium	1.3 J	0.62	mg/kg	SW846 6010B	07/18/05	HE4LN1AD
		Dilution Factor: 1				
Lead	1630	0.37	mg/kg	SW846 6010B	07/18/05	HE4LN1AM
		Dilution Factor: 1				
Cadmium	5.6	0.62	mg/kg	SW846 6010B	07/18/05	HE4LN1AE
		Dilution Factor: 1				
enium	1.6	0.62	mg/kg	SW846 6010B	07/18/05	HE4LN1AN
		Dilution Factor: 1				
Chromium	20.4	1.2	mg/kg	SW846 6010B	07/18/05	HE4LN1AF
		Dilution Factor: 1				
Thallium	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4LN1AP
		Dilution Factor: 1				
Copper	5290	3.1	mg/kg	SW846 6010B	07/18/05	HE4LN1AG
		Dilution Factor: 1				
Nickel	63.7	4.9	mg/kg	SW846 6010B	07/18/05	HE4LN1AH
		Dilution Factor: 1				
Silver	1.9	1.2	mg/kg	SW846 6010B	07/18/05	HE4LN1AJ
		Dilution Factor: 1				
Zinc	4890	24.6	mg/kg	SW846 6010B	07/18-07/19/05	HE4LN1AK
		Dilution Factor: 10				
Mercury	1.5	0.12	mg/kg	SW846 7471A	07/18/05	HE4LN1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

d blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-011

General Chemistry

Lot-Sample #...: A5G080236-011 Work Order #...: HE4LN Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 19

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	81.3	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189400

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-012

TOTAL Metals

Lot-Sample #...: A5G080236-012 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 45

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199035						
Arsenic	30.9	1.8	mg/kg	SW846 6010B	07/18/05	HE4LR1AL
		Dilution Factor: 1				
Antimony	163	10.8	mg/kg	SW846 6010B	07/18/05	HE4LR1AC
		Dilution Factor: 1				
Beryllium	1.4 J	0.90	mg/kg	SW846 6010B	07/18/05	HE4LR1AD
		Dilution Factor: 1				
Lead	1270	0.54	mg/kg	SW846 6010B	07/18/05	HE4LR1AM
		Dilution Factor: 1				
Cadmium	2.4	0.90	mg/kg	SW846 6010B	07/18/05	HE4LR1AE
		Dilution Factor: 1				
enium	ND	0.90	mg/kg	SW846 6010B	07/18/05	HE4LR1AN
		Dilution Factor: 1				
Chromium	13.4	1.8	mg/kg	SW846 6010B	07/18/05	HE4LR1AF
		Dilution Factor: 1				
Thallium	ND	1.8	mg/kg	SW846 6010B	07/18/05	HE4LR1AP
		Dilution Factor: 1				
Copper	79.3	4.5	mg/kg	SW846 6010B	07/18/05	HE4LR1AG
		Dilution Factor: 1				
Nickel	20.6	7.2	mg/kg	SW846 6010B	07/18/05	HE4LR1AH
		Dilution Factor: 1				
Silver	ND	1.8	mg/kg	SW846 6010B	07/18/05	HE4LR1AJ
		Dilution Factor: 1				
Zinc	365	3.6	mg/kg	SW846 6010B	07/18/05	HE4LR1AK
		Dilution Factor: 1				
Mercury	1.5	0.18	mg/kg	SW846 7471A	07/18/05	HE4LR1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

od blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-012

General Chemistry

Lot-Sample #...: A5G080236-012 Work Order #...: HE4LR Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 45

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	55.4	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189400

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-013

TOTAL Metals

Lot-Sample #...: A5G080236-013 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199035						
Arsenic	66.6	22.5	mg/kg	SW846 6010B	07/18-07/19/05	HE4LW1AL
		Dilution Factor: 20				
Antimony	473	135	mg/kg	SW846 6010B	07/18-07/19/05	HE4LW1AC
		Dilution Factor: 20				
Beryllium	0.97 J	0.56	mg/kg	SW846 6010B	07/18/05	HE4LW1AD
		Dilution Factor: 1				
Lead	6530	6.8	mg/kg	SW846 6010B	07/18-07/19/05	HE4LW1AM
		Dilution Factor: 20				
Cadmium	27.9	11.3	mg/kg	SW846 6010B	07/18-07/19/05	HE4LW1AE
		Dilution Factor: 20				
enium	ND G	11.3	mg/kg	SW846 6010B	07/18-07/19/05	HE4LW1AN
		Dilution Factor: 20				
Chromium	80.9	1.1	mg/kg	SW846 6010B	07/18/05	HE4LW1AF
		Dilution Factor: 1				
Thallium	ND G	22.5	mg/kg	SW846 6010B	07/18-07/19/05	HE4LW1AP
		Dilution Factor: 20				
Copper	10200	56.3	mg/kg	SW846 6010B	07/18-07/19/05	HE4LW1AG
		Dilution Factor: 20				
Nickel	114	4.5	mg/kg	SW846 6010B	07/18/05	HE4LW1AH
		Dilution Factor: 1				
Silver	34.0	1.1	mg/kg	SW846 6010B	07/18/05	HE4LW1AJ
		Dilution Factor: 1				
Zinc	4470	45.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4LW1AK
		Dilution Factor: 20				
Mercury	1.9	0.23	mg/kg	SW846 7471A	07/18/05	HE4LW1AQ
		Dilution Factor: 2				

NOTE(S):

R-sults and reporting limits have been adjusted for dry weight.

iod blank contamination. The associated method blank contains the target analyte at a reportable level.

evated reporting limit. The reporting limit is elevated due to matrix interference.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-013

General Chemistry

Lot-Sample #...: A5G080236-013 Work Order #...: HE4LW Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	88.7	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189400

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-014

TOTAL Metals

Lot-Sample #...: A5G080236-014 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 7.4

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199035						
Arsenic	211	21.6	mg/kg	SW846 6010B	07/18-07/19/05	HE4LX1AL
		Dilution Factor: 20				
Antimony	2330	130	mg/kg	SW846 6010B	07/18-07/19/05	HE4LX1AC
		Dilution Factor: 20				
Beryllium	1.2 J	0.54	mg/kg	SW846 6010B	07/18/05	HE4LX1AD
		Dilution Factor: 1				
Lead	22800	6.5	mg/kg	SW846 6010B	07/18-07/19/05	HE4LX1AM
		Dilution Factor: 20				
Cadmium	27.9	10.8	mg/kg	SW846 6010B	07/18-07/19/05	HE4LX1AE
		Dilution Factor: 20				
:nium	ND G	10.8	mg/kg	SW846 6010B	07/18-07/19/05	HE4LX1AN
		Dilution Factor: 20				
Chromium	102	1.1	mg/kg	SW846 6010B	07/18/05	HE4LX1AF
		Dilution Factor: 1				
Thallium	ND G	21.6	mg/kg	SW846 6010B	07/18-07/19/05	HE4LX1AP
		Dilution Factor: 20				
Copper	7090	54.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4LX1AG
		Dilution Factor: 20				
Nickel	191	4.3	mg/kg	SW846 6010B	07/18/05	HE4LX1AH
		Dilution Factor: 1				
Silver	37.2	1.1	mg/kg	SW846 6010B	07/18/05	HE4LX1AJ
		Dilution Factor: 1				
Zinc	6140	43.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4LX1AK
		Dilution Factor: 20				
Mercury	2.4	0.54	mg/kg	SW846 7471A	07/18/05	HE4LX1AQ
		Dilution Factor: 5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

d blank contamination. The associated method blank contains the target analyte at a reportable level.

vated reporting limit. The reporting limit is elevated due to matrix interference.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-014

General Chemistry

Lot-Sample #...: A5G080236-014 Work Order #...: HE4LX Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 7.4

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	92.6	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189400

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-015

TOTAL Metals

Lot-Sample #...: A5G080236-015 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 17

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199035						
Arsenic	11.7	1.2	mg/kg	SW846 6010B	07/18/05	HE4L01AL
		Dilution Factor: 1				
Antimony	2.6 B	7.3	mg/kg	SW846 6010B	07/18/05	HE4L01AC
		Dilution Factor: 1				
Beryllium	0.74 J	0.60	mg/kg	SW846 6010B	07/18/05	HE4L01AD
		Dilution Factor: 1				
Lead	8290	18.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4L01AM
		Dilution Factor: 50				
Cadmium	20.5	0.60	mg/kg	SW846 6010B	07/18/05	HE4L01AE
		Dilution Factor: 1				
enium	ND	0.60	mg/kg	SW846 6010B	07/18/05	HE4L01AN
		Dilution Factor: 1				
Chromium	995	1.2	mg/kg	SW846 6010B	07/18/05	HE4L01AF
		Dilution Factor: 1				
Thallium	0.75 B	1.2	mg/kg	SW846 6010B	07/18/05	HE4L01AP
		Dilution Factor: 1				
Copper	352	3.0	mg/kg	SW846 6010B	07/18/05	HE4L01AG
		Dilution Factor: 1				
Nickel	8.5	4.8	mg/kg	SW846 6010B	07/18/05	HE4L01AH
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4L01AJ
		Dilution Factor: 1				
Zinc	30200	121	mg/kg	SW846 6010B	07/18-07/19/05	HE4L01AK
		Dilution Factor: 50				
Mercury	1.4	0.12	mg/kg	SW846 7471A	07/18/05	HE4L01AQ
		Dilution Factor: 1				

NOTE(S):

its and reporting limits have been adjusted for dry weight.

imated result. Result is less than RL.

ethod blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-015

General Chemistry

Lot-Sample #...: A5G080236-015 Work Order #...: HE4L0 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 17

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	82.7	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-016

TOTAL Metals

Lot-Sample #...: A5G080236-016 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199035						
Arsenic	4.3	1.2	mg/kg	SW846 6010B	07/18/05	HE4L21AL
		Dilution Factor: 1				
Antimony	2.4 B	7.0	mg/kg	SW846 6010B	07/18/05	HE4L21AC
		Dilution Factor: 1				
Beryllium	0.43 B,J	0.59	mg/kg	SW846 6010B	07/18/05	HE4L21AD
		Dilution Factor: 1				
Lead	51.6	0.35	mg/kg	SW846 6010B	07/18/05	HE4L21AM
		Dilution Factor: 1				
Cadmium	0.34 B	0.59	mg/kg	SW846 6010B	07/18/05	HE4L21AE
		Dilution Factor: 1				
enium	ND	0.59	mg/kg	SW846 6010B	07/18/05	HE4L21AN
		Dilution Factor: 1				
Chromium	10.1	1.2	mg/kg	SW846 6010B	07/18/05	HE4L21AF
		Dilution Factor: 1				
Thallium	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4L21AP
		Dilution Factor: 1				
Copper	21.8	2.9	mg/kg	SW846 6010B	07/18/05	HE4L21AG
		Dilution Factor: 1				
Nickel	14.1	4.7	mg/kg	SW846 6010B	07/18/05	HE4L21AH
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4L21AJ
		Dilution Factor: 1				
Zinc	55.8	2.3	mg/kg	SW846 6010B	07/18/05	HE4L21AK
		Dilution Factor: 1				
Mercury	ND	0.12	mg/kg	SW846 7471A	07/18/05	HE4L21AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

· ated result. Result is less than RL.

j blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-016

General Chemistry

Lot-Sample #...: A5G080236-016 Work Order #...: HE4L2 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	85.2	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: W-070705-JH-017

TOTAL Metals

Lot-Sample #...: A5G080236-017 Matrix.....: WG
Date Sampled...: 07/07/05 Date Received..: 07/08/05

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5193022						
Mercury	ND	0.00020	mg/L	SW846 7470A	07/12/05	HE4L41AP
		Dilution Factor: 1				
Arsenic	ND	0.010	mg/L	SW846 6010B	07/12-07/17/05	HE4L41AK
		Dilution Factor: 1				
Antimony	ND	0.060	mg/L	SW846 6010B	07/12-07/17/05	HE4L41AA
		Dilution Factor: 1				
Beryllium	ND	0.0050	mg/L	SW846 6010B	07/12-07/17/05	HE4L41AC
		Dilution Factor: 1				
Lead	ND	0.0030	mg/L	SW846 6010B	07/12-07/17/05	HE4L41AL
		Dilution Factor: 1				
mium	ND	0.0050	mg/L	SW846 6010B	07/12-07/17/05	HE4L41AD
		Dilution Factor: 1				
Selenium	ND	0.0050	mg/L	SW846 6010B	07/12-07/17/05	HE4L41AM
		Dilution Factor: 1				
Chromium	ND	0.010	mg/L	SW846 6010B	07/12-07/17/05	HE4L41AE
		Dilution Factor: 1				
Thallium	ND	0.010	mg/L	SW846 6010B	07/12-07/17/05	HE4L41AN
		Dilution Factor: 1				
Copper	ND	0.025	mg/L	SW846 6010B	07/12-07/17/05	HE4L41AF
		Dilution Factor: 1				
Nickel	ND	0.040	mg/L	SW846 6010B	07/12-07/17/05	HE4L41AG
		Dilution Factor: 1				
Silver	ND	0.010	mg/L	SW846 6010B	07/12-07/17/05	HE4L41AH
		Dilution Factor: 1				
Zinc	ND	0.020	mg/L	SW846 6010B	07/12-07/17/05	HE4L41AJ
		Dilution Factor: 1				

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-018

TOTAL Metals

Lot-Sample #...: A5G080236-018 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 6.5

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199035						
Arsenic	6.8	1.1	mg/kg	SW846 6010B	07/18/05	HE4MC1AL
		Dilution Factor: 1				
Antimony	7.3	6.4	mg/kg	SW846 6010B	07/18/05	HE4MC1AC
		Dilution Factor: 1				
Beryllium	2.4 J	0.53	mg/kg	SW846 6010B	07/18/05	HE4MC1AD
		Dilution Factor: 1				
Lead	2120	16.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4MC1AM
		Dilution Factor: 50				
Cadmium	16.7	0.53	mg/kg	SW846 6010B	07/18/05	HE4MC1AE
		Dilution Factor: 1				
Selenium	3.7	0.53	mg/kg	SW846 6010B	07/18/05	HE4MC1AN
		Dilution Factor: 1				
Chromium	24.2	1.1	mg/kg	SW846 6010B	07/18/05	HE4MC1AF
		Dilution Factor: 1				
Thallium	ND	1.1	mg/kg	SW846 6010B	07/18/05	HE4MC1AP
		Dilution Factor: 1				
Copper	4510	2.7	mg/kg	SW846 6010B	07/18/05	HE4MC1AG
		Dilution Factor: 1				
Nickel	70.7	4.3	mg/kg	SW846 6010B	07/18/05	HE4MC1AH
		Dilution Factor: 1				
Silver	2.0	1.1	mg/kg	SW846 6010B	07/18/05	HE4MC1AJ
		Dilution Factor: 1				
Zinc	10500	107	mg/kg	SW846 6010B	07/18-07/19/05	HE4MC1AK
		Dilution Factor: 50				
Mercury	0.31	0.11	mg/kg	SW846 7471A	07/18/05	HE4MC1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-018

General Chemistry

Lot-Sample #...: A5G080236-018 Work Order #...: HE4MC Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 6.5

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	93.5	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-019

TOTAL Metals

Lot-Sample #...: A5G080236-019 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 11

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199035						
Arsenic	10.8	1.1	mg/kg	SW846 6010B	07/18/05	HE4MK1AL
		Dilution Factor: 1				
Antimony	9.0	6.7	mg/kg	SW846 6010B	07/18/05	HE4MK1AC
		Dilution Factor: 1				
Beryllium	1.3 J	0.56	mg/kg	SW846 6010B	07/18/05	HE4MK1AD
		Dilution Factor: 1				
Lead	2880	16.8	mg/kg	SW846 6010B	07/18-07/19/05	HE4MK1AM
		Dilution Factor: 50				
Cadmium	16.6	0.56	mg/kg	SW846 6010B	07/18/05	HE4MK1AE
		Dilution Factor: 1				
Selenium	2.4	0.56	mg/kg	SW846 6010B	07/18/05	HE4MK1AN
		Dilution Factor: 1				
Chromium	44.1	1.1	mg/kg	SW846 6010B	07/18/05	HE4MK1AF
		Dilution Factor: 1				
Thallium	ND	1.1	mg/kg	SW846 6010B	07/18/05	HE4MK1AP
		Dilution Factor: 1				
Copper	3340	2.8	mg/kg	SW846 6010B	07/18/05	HE4MK1AG
		Dilution Factor: 1				
Nickel	110	4.5	mg/kg	SW846 6010B	07/18/05	HE4MK1AH
		Dilution Factor: 1				
Silver	2.5	1.1	mg/kg	SW846 6010B	07/18/05	HE4MK1AJ
		Dilution Factor: 1				
Zinc	8960	112	mg/kg	SW846 6010B	07/18-07/19/05	HE4MK1AK
		Dilution Factor: 50				
Mercury	0.59	0.11	mg/kg	SW846 7471A	07/18/05	HE4MK1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-019

General Chemistry

Lot-Sample #...: A5G080236-019 Work Order #...: HE4MK Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 11

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	89.1	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-020

TOTAL Metals

Lot-Sample #....: A5G080236-020 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 19

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199035						
Arsenic	4.9	1.2	mg/kg	SW846 6010B	07/18/05	HE4MN1AL
		Dilution Factor: 1				
Antimony	ND	7.4	mg/kg	SW846 6010B	07/18/05	HE4MN1AC
		Dilution Factor: 1				
Beryllium	0.34 B,J	0.62	mg/kg	SW846 6010B	07/18/05	HE4MN1AD
		Dilution Factor: 1				
Lead	8.8 E	0.37	mg/kg	SW846 6010B	07/18/05	HE4MN1AM
		Dilution Factor: 1				
Cadmium	0.26 B	0.62	mg/kg	SW846 6010B	07/18/05	HE4MN1AE
		Dilution Factor: 1				
Selenium	ND	0.62	mg/kg	SW846 6010B	07/18/05	HE4MN1AN
		Dilution Factor: 1				
Chromium	7.9 E	1.2	mg/kg	SW846 6010B	07/18/05	HE4MN1AF
		Dilution Factor: 1				
Thallium	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4MN1AP
		Dilution Factor: 1				
Copper	13.0 E	3.1	mg/kg	SW846 6010B	07/18/05	HE4MN1AG
		Dilution Factor: 1				
Nickel	10.1 E	4.9	mg/kg	SW846 6010B	07/18/05	HE4MN1AH
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4MN1AJ
		Dilution Factor: 1				
Zinc	36.5 E	2.5	mg/kg	SW846 6010B	07/18/05	HE4MN1AK
		Dilution Factor: 1				
Mercury	ND	0.12	mg/kg	SW846 7471A	07/18/05	HE4MN1AQ
		Dilution Factor: 1				

(Continued on next page)

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-020

TOTAL Metals

Lot-Sample #...: A5G080236-020 Matrix.....: SO

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

E Matrix interference.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-020

General Chemistry

Lot-Sample #...: A5G080236-020 Work Order #...: HE4MN Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 19

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	81.1	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-021

TOTAL Metals

Lot-Sample #...: A5G080236-021 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 3.1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199035						
Arsenic	12.1	1.0	mg/kg	SW846 6010B	07/18/05	HE4MR1AL
		Dilution Factor: 1				
Antimony	32.9	6.2	mg/kg	SW846 6010B	07/18/05	HE4MR1AC
		Dilution Factor: 1				
Beryllium	2.6 J	0.52	mg/kg	SW846 6010B	07/18/05	HE4MR1AD
		Dilution Factor: 1				
Lead	4460	1.5	mg/kg	SW846 6010B	07/18/05	HE4MR1AM
		Dilution Factor: 5				
Cadmium	26.7	0.52	mg/kg	SW846 6010B	07/18/05	HE4MR1AE
		Dilution Factor: 1				
enium	0.60	0.52	mg/kg	SW846 6010B	07/18/05	HE4MR1AN
		Dilution Factor: 1				
Chromium	33.1	1.0	mg/kg	SW846 6010B	07/18/05	HE4MR1AF
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18/05	HE4MR1AP
		Dilution Factor: 1				
Copper	18800	12.9	mg/kg	SW846 6010B	07/18/05	HE4MR1AG
		Dilution Factor: 5				
Nickel	246	4.1	mg/kg	SW846 6010B	07/18/05	HE4MR1AH
		Dilution Factor: 1				
Silver	6.8	1.0	mg/kg	SW846 6010B	07/18/05	HE4MR1AJ
		Dilution Factor: 1				
Zinc	16900	103	mg/kg	SW846 6010B	07/18-07/19/05	HE4MR1AK
		Dilution Factor: 50				
Mercury	0.52	0.10	mg/kg	SW846 7471A	07/18/05	HE4MR1AQ
		Dilution Factor: 1				

NOTE(S):

R--ults and reporting limits have been adjusted for dry weight.

od blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-021

General Chemistry

Lot-Sample #...: A5G080236-021 Work Order #...: HE4MR Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 3.1

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	96.9	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-022

TOTAL Metals

Lot-Sample #...: A5G080236-022 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 33

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199041						
Arsenic	17.5	1.5	mg/kg	SW846 6010B	07/18-07/19/05	HE4MT1AL
		Dilution Factor: 1				
Antimony	3.4 B	9.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4MT1AC
		Dilution Factor: 1				
Beryllium	1.5 J	0.75	mg/kg	SW846 6010B	07/18-07/19/05	HE4MT1AD
		Dilution Factor: 1				
Lead	347	0.45	mg/kg	SW846 6010B	07/18-07/19/05	HE4MT1AM
		Dilution Factor: 1				
Cadmium	11.3	0.75	mg/kg	SW846 6010B	07/18-07/19/05	HE4MT1AE
		Dilution Factor: 1				
enium	ND	0.75	mg/kg	SW846 6010B	07/18-07/19/05	HE4MT1AN
		Dilution Factor: 1				
Chromium	14.6	1.5	mg/kg	SW846 6010B	07/18-07/19/05	HE4MT1AF
		Dilution Factor: 1				
Thallium	2.0	1.5	mg/kg	SW846 6010B	07/18-07/19/05	HE4MT1AP
		Dilution Factor: 1				
Copper	168 J	3.7	mg/kg	SW846 6010B	07/18-07/19/05	HE4MT1AG
		Dilution Factor: 1				
Nickel	48.3	6.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4MT1AH
		Dilution Factor: 1				
Silver	1.2 B	1.5	mg/kg	SW846 6010B	07/18-07/19/05	HE4MT1AJ
		Dilution Factor: 1				
Zinc	681 J	3.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4MT1AK
		Dilution Factor: 1				
Mercury	0.025 B	0.15	mg/kg	SW846 7471A	07/18/05	HE4MT1AQ
		Dilution Factor: 1				

NOTE(S):

lts and reporting limits have been adjusted for dry weight.

imated result. Result is less than RL.

ethod blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-022

General Chemistry

Lot-Sample #...: A5G080236-022 Work Order #...: HE4MT Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 33

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	66.9	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-023

TOTAL Metals

Lot-Sample #...: A5G080236-023 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received...: 07/08/05
% Moisture.....: 16

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199041						
Arsenic	3.6	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4M01AL
		Dilution Factor: 1				
Antimony	ND	7.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4M01AC
		Dilution Factor: 1				
Beryllium	0.34 B,J	0.60	mg/kg	SW846 6010B	07/18-07/19/05	HE4M01AD
		Dilution Factor: 1				
Lead	9.1	0.36	mg/kg	SW846 6010B	07/18-07/19/05	HE4M01AM
		Dilution Factor: 1				
Cadmium	0.29 B	0.60	mg/kg	SW846 6010B	07/18-07/19/05	HE4M01AE
		Dilution Factor: 1				
enium	ND	0.60	mg/kg	SW846 6010B	07/18-07/19/05	HE4M01AN
		Dilution Factor: 1				
Chromium	7.6	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4M01AF
		Dilution Factor: 1				
Thallium	ND	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4M01AP
		Dilution Factor: 1				
Copper	20.1 J	3.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4M01AG
		Dilution Factor: 1				
Nickel	9.5	4.8	mg/kg	SW846 6010B	07/18-07/19/05	HE4M01AH
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4M01AJ
		Dilution Factor: 1				
Zinc	60.1 J	2.4	mg/kg	SW846 6010B	07/18-07/19/05	HE4M01AK
		Dilution Factor: 1				
Mercury	ND	0.12	mg/kg	SW846 7471A	07/18/05	HE4M01AQ
		Dilution Factor: 1				

NOTE(S):

ts and reporting limits have been adjusted for dry weight.

nated result. Result is less than RL.

J ethod blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-023

General Chemistry

Lot-Sample #...: A5G080236-023 Work Order #...: HE4M0 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 16

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	83.9	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-024

TOTAL Metals

Lot-Sample #...: A5G080236-024 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 4.9

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199041						
Arsenic	18.5	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4M21AL
		Dilution Factor: 1				
Antimony	64.5	6.3	mg/kg	SW846 6010B	07/18-07/19/05	HE4M21AC
		Dilution Factor: 1				
Beryllium	2.3 J	0.53	mg/kg	SW846 6010B	07/18-07/19/05	HE4M21AD
		Dilution Factor: 1				
Lead	4900	15.8	mg/kg	SW846 6010B	07/18-07/19/05	HE4M21AM
		Dilution Factor: 50				
Cadmium	10.2	0.53	mg/kg	SW846 6010B	07/18-07/19/05	HE4M21AE
		Dilution Factor: 1				
nium	0.93	0.53	mg/kg	SW846 6010B	07/18-07/19/05	HE4M21AN
		Dilution Factor: 1				
Chromium	35.6	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4M21AF
		Dilution Factor: 1				
Thallium	ND	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4M21AP
		Dilution Factor: 1				
Copper	73900 J	131	mg/kg	SW846 6010B	07/18-07/19/05	HE4M21AG
		Dilution Factor: 50				
Nickel	2130	4.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4M21AH
		Dilution Factor: 1				
Silver	25.5	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4M21AJ
		Dilution Factor: 1				
Zinc	7760 J	105	mg/kg	SW846 6010B	07/18-07/19/05	HE4M21AK
		Dilution Factor: 50				
Mercury	0.87	0.11	mg/kg	SW846 7471A	07/18/05	HE4M21AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-024

General Chemistry

Lot-Sample #...: A5G080236-024 Work Order #...: HE4M2 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 4.9

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	95.1	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-025

TOTAL Metals

Lot-Sample #...: A5G080236-025 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 12

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199041						
Arsenic	6.5	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4M31AL
		Dilution Factor: 1				
Antimony	0.45 B	6.8	mg/kg	SW846 6010B	07/18-07/19/05	HE4M31AC
		Dilution Factor: 1				
Beryllium	0.30 B,J	0.57	mg/kg	SW846 6010B	07/18-07/19/05	HE4M31AD
		Dilution Factor: 1				
Lead	122	0.34	mg/kg	SW846 6010B	07/18-07/19/05	HE4M31AM
		Dilution Factor: 1				
Cadmium	1.1	0.57	mg/kg	SW846 6010B	07/18-07/19/05	HE4M31AE
		Dilution Factor: 1				
enium	ND	0.57	mg/kg	SW846 6010B	07/18-07/19/05	HE4M31AN
		Dilution Factor: 1				
Chromium	7.0	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4M31AF
		Dilution Factor: 1				
Thallium	ND	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4M31AP
		Dilution Factor: 1				
Copper	149 J	2.8	mg/kg	SW846 6010B	07/18-07/19/05	HE4M31AG
		Dilution Factor: 1				
Nickel	10.1	4.6	mg/kg	SW846 6010B	07/18-07/19/05	HE4M31AH
		Dilution Factor: 1				
Silver	ND	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4M31AJ
		Dilution Factor: 1				
Zinc	415 J	2.3	mg/kg	SW846 6010B	07/18-07/19/05	HE4M31AK
		Dilution Factor: 1				
Mercury	0.65	0.11	mg/kg	SW846 7471A	07/18/05	HE4M31AQ
		Dilution Factor: 1				

NOTE(S):

and reporting limits have been adjusted for dry weight.

mated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-025

General Chemistry

Lot-Sample #...: A5G080236-025 Work Order #...: HE4M3 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 12

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	87.8	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-027

General Chemistry

Lot-Sample #...: A5G080236-027 Work Order #...: HE4M5 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 7.2

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	92.8	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JB-027

TOTAL Metals

Lot-Sample #...: A5G080236-027 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 7.2

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199041						
Arsenic	1.7	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4M51AL
		Dilution Factor: 1				
Antimony	1.0 B	6.5	mg/kg	SW846 6010B	07/18-07/19/05	HE4M51AC
		Dilution Factor: 1				
Beryllium	0.61 J	0.54	mg/kg	SW846 6010B	07/18-07/19/05	HE4M51AD
		Dilution Factor: 1				
Lead	54.6	0.32	mg/kg	SW846 6010B	07/18-07/19/05	HE4M51AM
		Dilution Factor: 1				
Cadmium	0.47 B	0.54	mg/kg	SW846 6010B	07/18-07/19/05	HE4M51AE
		Dilution Factor: 1				
Selenium	ND	0.54	mg/kg	SW846 6010B	07/18-07/19/05	HE4M51AN
		Dilution Factor: 1				
Chromium	12.3	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4M51AF
		Dilution Factor: 1				
Thallium	ND	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4M51AP
		Dilution Factor: 1				
Copper	201 J	2.7	mg/kg	SW846 6010B	07/18-07/19/05	HE4M51AG
		Dilution Factor: 1				
Nickel	80.9	4.3	mg/kg	SW846 6010B	07/18-07/19/05	HE4M51AH
		Dilution Factor: 1				
Silver	ND	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4M51AJ
		Dilution Factor: 1				
Zinc	257 J	2.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4M51AK
		Dilution Factor: 1				
Mercury	ND	0.11	mg/kg	SW846 7471A	07/18/05	HE4M51AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-026

TOTAL Metals

Lot-Sample #...: A5G080236-026 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 16

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199041						
Arsenic	2.8	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4M41AL
		Dilution Factor: 1				
Antimony	ND	7.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4M41AC
		Dilution Factor: 1				
Beryllium	0.35 B,J	0.60	mg/kg	SW846 6010B	07/18-07/19/05	HE4M41AD
		Dilution Factor: 1				
Lead	7.4	0.36	mg/kg	SW846 6010B	07/18-07/19/05	HE4M41AM
		Dilution Factor: 1				
Cadmium	0.26 B	0.60	mg/kg	SW846 6010B	07/18-07/19/05	HE4M41AE
		Dilution Factor: 1				
enium	ND	0.60	mg/kg	SW846 6010B	07/18-07/19/05	HE4M41AN
		Dilution Factor: 1				
Chromium	7.3	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4M41AF
		Dilution Factor: 1				
Thallium	ND	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4M41AP
		Dilution Factor: 1				
Copper	15.6 J	3.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4M41AG
		Dilution Factor: 1				
Nickel	10.0	4.8	mg/kg	SW846 6010B	07/18-07/19/05	HE4M41AH
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4M41AJ
		Dilution Factor: 1				
Zinc	30.5 J	2.4	mg/kg	SW846 6010B	07/18-07/19/05	HE4M41AK
		Dilution Factor: 1				
Mercury	ND	0.12	mg/kg	SW846 7471A	07/18/05	HE4M41AQ
		Dilution Factor: 1				

NOTE(S):

and reporting limits have been adjusted for dry weight.

imated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-026

General Chemistry

Lot-Sample #...: A5G080236-026 Work Order #...: HE4M4 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 16

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	83.7	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-028

TOTAL Metals

Lot-Sample #...: A5G080236-028 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 18

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199041						
Arsenic	16.0	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4M61AL
		Dilution Factor: 1				
Antimony	3.5 B	7.3	mg/kg	SW846 6010B	07/18-07/19/05	HE4M61AC
		Dilution Factor: 1				
Beryllium	1.4 J	0.61	mg/kg	SW846 6010B	07/18-07/19/05	HE4M61AD
		Dilution Factor: 1				
Lead	433	0.37	mg/kg	SW846 6010B	07/18-07/19/05	HE4M61AM
		Dilution Factor: 1				
Cadmium	3.1	0.61	mg/kg	SW846 6010B	07/18-07/19/05	HE4M61AE
		Dilution Factor: 1				
enium	ND	0.61	mg/kg	SW846 6010B	07/18-07/19/05	HE4M61AN
		Dilution Factor: 1				
Chromium	9.6	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4M61AF
		Dilution Factor: 1				
Thallium	ND	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4M61AP
		Dilution Factor: 1				
Copper	140 J	3.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4M61AG
		Dilution Factor: 1				
Nickel	17.0	4.9	mg/kg	SW846 6010B	07/18-07/19/05	HE4M61AH
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4M61AJ
		Dilution Factor: 1				
Zinc	533 J	2.4	mg/kg	SW846 6010B	07/18-07/19/05	HE4M61AK
		Dilution Factor: 1				
Mercury	0.18	0.12	mg/kg	SW846 7471A	07/18/05	HE4M61AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

ated result. Result is less than RL.

d blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-028

General Chemistry

Lot-Sample #...: A5G080236-028 Work Order #...: HE4M6 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 18

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	82.1	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-029

TOTAL Metals

Lot-Sample #...: A5G080236-029 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 18

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199041						
Arsenic	4.3	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4M81AL
		Dilution Factor: 1				
Antimony	ND	7.3	mg/kg	SW846 6010B	07/18-07/19/05	HE4M81AC
		Dilution Factor: 1				
Beryllium	0.44 B,J	0.61	mg/kg	SW846 6010B	07/18-07/19/05	HE4M81AD
		Dilution Factor: 1				
Lead	6.7	0.36	mg/kg	SW846 6010B	07/18-07/19/05	HE4M81AM
		Dilution Factor: 1				
Cadmium	0.24 B	0.61	mg/kg	SW846 6010B	07/18-07/19/05	HE4M81AE
		Dilution Factor: 1				
nium	ND	0.61	mg/kg	SW846 6010B	07/18-07/19/05	HE4M81AN
		Dilution Factor: 1				
Chromium	8.6	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4M81AF
		Dilution Factor: 1				
Thallium	ND	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4M81AP
		Dilution Factor: 1				
Copper	11.9 J	3.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4M81AG
		Dilution Factor: 1				
Nickel	12.0	4.9	mg/kg	SW846 6010B	07/18-07/19/05	HE4M81AH
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4M81AJ
		Dilution Factor: 1				
Zinc	26.2 J	2.4	mg/kg	SW846 6010B	07/18-07/19/05	HE4M81AK
		Dilution Factor: 1				
Mercury	ND	0.12	mg/kg	SW846 7471A	07/18/05	HE4M81AQ
		Dilution Factor: 1				

NOTE(S):

R and reporting limits have been adjusted for dry weight.

ted result. Result is less than RL.

J od blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-029

General Chemistry

Lot-Sample #...: A5G080236-029 Work Order #...: HE4M8 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 18

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	82.3	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-030

TOTAL Metals

Lot-Sample #...: A5G080236-030 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 3.6

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199041						
Arsenic	1.1	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4M91AL
		Dilution Factor: 1				
Antimony	ND	6.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4M91AC
		Dilution Factor: 1				
Beryllium	0.31 B,J	0.52	mg/kg	SW846 6010B	07/18-07/19/05	HE4M91AD
		Dilution Factor: 1				
Lead	243	0.31	mg/kg	SW846 6010B	07/18-07/19/05	HE4M91AM
		Dilution Factor: 1				
Cadmium	2.0	0.52	mg/kg	SW846 6010B	07/18-07/19/05	HE4M91AE
		Dilution Factor: 1				
lenium	ND	0.52	mg/kg	SW846 6010B	07/18-07/19/05	HE4M91AN
		Dilution Factor: 1				
Chromium	6.4	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4M91AF
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4M91AP
		Dilution Factor: 1				
Copper	299 J	2.6	mg/kg	SW846 6010B	07/18-07/19/05	HE4M91AG
		Dilution Factor: 1				
Nickel	10.4	4.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4M91AH
		Dilution Factor: 1				
Silver	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4M91AJ
		Dilution Factor: 1				
Zinc	1120 J	10.4	mg/kg	SW846 6010B	07/18-07/19/05	HE4M91AK
		Dilution Factor: 5				
Mercury	0.11	0.10	mg/kg	SW846 7471A	07/18/05	HE4M91AQ
		Dilution Factor: 1				

NOTE(S):

its and reporting limits have been adjusted for dry weight.

stimated result. Result is less than RL.

Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-030

General Chemistry

Lot-Sample #...: A5G080236-030 Work Order #...: HE4M9 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 3.6

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	96.5	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-031

TOTAL Metals

Lot-Sample #...: A5G080236-031 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 33

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199041						
Arsenic	13.7	1.5	mg/kg	SW846 6010B	07/18-07/19/05	HE4NC1AL
		Dilution Factor: 1				
Antimony	8.5 B	9.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4NC1AC
		Dilution Factor: 1				
Beryllium	0.85 J	0.75	mg/kg	SW846 6010B	07/18-07/19/05	HE4NC1AD
		Dilution Factor: 1				
Lead	730	0.90	mg/kg	SW846 6010B	07/18-07/19/05	HE4NC1AM
		Dilution Factor: 2				
Cadmium	9.0	0.75	mg/kg	SW846 6010B	07/18-07/19/05	HE4NC1AE
		Dilution Factor: 1				
enium	ND G	1.5	mg/kg	SW846 6010B	07/18-07/19/05	HE4NC1AN
		Dilution Factor: 2				
Chromium	32.2	1.5	mg/kg	SW846 6010B	07/18-07/19/05	HE4NC1AF
		Dilution Factor: 1				
Thallium	ND G	3.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4NC1AP
		Dilution Factor: 2				
Copper	216 J	3.8	mg/kg	SW846 6010B	07/18-07/19/05	HE4NC1AG
		Dilution Factor: 1				
Nickel	28.7	6.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4NC1AH
		Dilution Factor: 1				
Silver	ND G	3.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4NC1AJ
		Dilution Factor: 2				
Zinc	1060 J	3.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4NC1AK
		Dilution Factor: 1				
Mercury	0.52	0.15	mg/kg	SW846 7471A	07/18/05	HE4NC1AQ
		Dilution Factor: 1				

(Continued on next page)

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-031

TOTAL Metals

Lot-Sample #...: A5G080236-031 Matrix.....: SO

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-031

General Chemistry

Lot-Sample #...: A5G080236-031 Work Order #...: HE4NC Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 33

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	66.6	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-032

TOTAL Metals

Lot-Sample #...: A5G080236-032 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199041						
rsenic	3.8	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4ND1AL
		Dilution Factor: 1				
ntimony	ND	7.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4ND1AC
		Dilution Factor: 1				
eryllium	0.35 B,J	0.59	mg/kg	SW846 6010B	07/18-07/19/05	HE4ND1AD
		Dilution Factor: 1				
ead	6.0	0.35	mg/kg	SW846 6010B	07/18-07/19/05	HE4ND1AM
		Dilution Factor: 1				
admium	0.27 B	0.59	mg/kg	SW846 6010B	07/18-07/19/05	HE4ND1AE
		Dilution Factor: 1				
elenium	ND	0.59	mg/kg	SW846 6010B	07/18-07/19/05	HE4ND1AN
		Dilution Factor: 1				
romium	7.9	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4ND1AF
		Dilution Factor: 1				
allium	ND	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4ND1AP
		Dilution Factor: 1				
pper	8.6 J	3.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4ND1AG
		Dilution Factor: 1				
ckel	8.5	4.7	mg/kg	SW846 6010B	07/18-07/19/05	HE4ND1AH
		Dilution Factor: 1				
lver	ND	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4ND1AJ
		Dilution Factor: 1				
nc	33.6 J	2.4	mg/kg	SW846 6010B	07/18-07/19/05	HE4ND1AK
		Dilution Factor: 1				
rcury	ND	0.12	mg/kg	SW846 7471A	07/18/05	HE4ND1AQ
		Dilution Factor: 1				

TE(S):

lts and reporting limits have been adjusted for dry weight.

stimated result. Result is less than RL.

ethod blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-032

General Chemistry

Lot-Sample #...: A5G080236-032 Work Order #...: HE4ND Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	84.6	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-033

TOTAL Metals

Lot-Sample #...: A5G080236-033 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 9.2

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199041						
Arsenic	1.5	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4NE1AL
		Dilution Factor: 1				
Antimony	0.41 B	6.6	mg/kg	SW846 6010B	07/18-07/19/05	HE4NE1AC
		Dilution Factor: 1				
Beryllium	0.19 B,J	0.55	mg/kg	SW846 6010B	07/18-07/19/05	HE4NE1AD
		Dilution Factor: 1				
Lead	9.4	0.33	mg/kg	SW846 6010B	07/18-07/19/05	HE4NE1AM
		Dilution Factor: 1				
Cadmium	0.093 B	0.55	mg/kg	SW846 6010B	07/18-07/19/05	HE4NE1AE
		Dilution Factor: 1				
Selenium	ND	0.55	mg/kg	SW846 6010B	07/18-07/19/05	HE4NE1AN
		Dilution Factor: 1				
Chromium	2.7	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4NE1AF
		Dilution Factor: 1				
Thallium	ND	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4NE1AP
		Dilution Factor: 1				
Copper	5.7 J	2.8	mg/kg	SW846 6010B	07/18-07/19/05	HE4NE1AG
		Dilution Factor: 1				
Nickel	2.7 B	4.4	mg/kg	SW846 6010B	07/18-07/19/05	HE4NE1AH
		Dilution Factor: 1				
Silver	ND	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4NE1AJ
		Dilution Factor: 1				
Zinc	20.8 J	2.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4NE1AK
		Dilution Factor: 1				
Mercury	ND	0.11	mg/kg	SW846 7471A	07/18/05	HE4NE1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-033

General Chemistry

Lot-Sample #...: A5G080236-033 Work Order #...: HE4NE Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 9.2

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	90.8	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-034

TOTAL Metals

Lot-Sample #...: A5G080236-034 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 14

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199041						
Arsenic	4.9	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4NF1AL
		Dilution Factor: 1				
Antimony	ND	7.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4NF1AC
		Dilution Factor: 1				
Beryllium	0.55 B,J	0.58	mg/kg	SW846 6010B	07/18-07/19/05	HE4NF1AD
		Dilution Factor: 1				
Lead	10.5	0.35	mg/kg	SW846 6010B	07/18-07/19/05	HE4NF1AM
		Dilution Factor: 1				
Cadmium	0.38 B	0.58	mg/kg	SW846 6010B	07/18-07/19/05	HE4NF1AE
		Dilution Factor: 1				
Selenium	ND	0.58	mg/kg	SW846 6010B	07/18-07/19/05	HE4NF1AN
		Dilution Factor: 1				
Chromium	13.2	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4NF1AF
		Dilution Factor: 1				
Thallium	ND	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4NF1AP
		Dilution Factor: 1				
Copper	22.8 J	2.9	mg/kg	SW846 6010B	07/18-07/19/05	HE4NF1AG
		Dilution Factor: 1				
Nickel	22.6	4.6	mg/kg	SW846 6010B	07/18-07/19/05	HE4NF1AH
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4NF1AJ
		Dilution Factor: 1				
Zinc	38.3 J	2.3	mg/kg	SW846 6010B	07/18-07/19/05	HE4NF1AK
		Dilution Factor: 1				
Mercury	ND	0.12	mg/kg	SW846 7471A	07/18/05	HE4NF1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-034

General Chemistry

Lot-Sample #...: A5G080236-034 Work Order #...: HE4NF Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	86.2	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-035

TOTAL Metals

Lot-Sample #...: A5G080236-035 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 5.3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199041						
Arsenic	2.7	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4NH1AL
		Dilution Factor: 1				
Antimony	ND	6.3	mg/kg	SW846 6010B	07/18-07/19/05	HE4NH1AC
		Dilution Factor: 1				
Beryllium	1.2 J	0.53	mg/kg	SW846 6010B	07/18-07/19/05	HE4NH1AD
		Dilution Factor: 1				
Lead	394	0.32	mg/kg	SW846 6010B	07/18-07/19/05	HE4NH1AM
		Dilution Factor: 1				
Cadmium	2.8	0.53	mg/kg	SW846 6010B	07/18-07/19/05	HE4NH1AE
		Dilution Factor: 1				
Selenium	2.5	0.53	mg/kg	SW846 6010B	07/18-07/19/05	HE4NH1AN
		Dilution Factor: 1				
Chromium	33.0	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4NH1AF
		Dilution Factor: 1				
Thallium	ND	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4NH1AP
		Dilution Factor: 1				
Copper	5010 J	2.6	mg/kg	SW846 6010B	07/18-07/19/05	HE4NH1AG
		Dilution Factor: 1				
Nickel	28.8	4.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4NH1AH
		Dilution Factor: 1				
Silver	0.64 B	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4NH1AJ
		Dilution Factor: 1				
Zinc	3270 J	21.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4NH1AK
		Dilution Factor: 10				
Mercury	0.13	0.11	mg/kg	SW846 7471A	07/18/05	HE4NH1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

J Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-035

General Chemistry

Lot-Sample #...: A5G080236-035 Work Order #...: HE4NH Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 5.3

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	94.7	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-036

TOTAL Metals

Lot-Sample #...: A5G080236-036 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 4.5

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199041						
Arsenic	3.2	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4NK1AL
		Dilution Factor: 1				
Antimony	0.54 B	6.3	mg/kg	SW846 6010B	07/18-07/19/05	HE4NK1AC
		Dilution Factor: 1				
Beryllium	0.95 J	0.52	mg/kg	SW846 6010B	07/18-07/19/05	HE4NK1AD
		Dilution Factor: 1				
Lead	319	0.31	mg/kg	SW846 6010B	07/18-07/19/05	HE4NK1AM
		Dilution Factor: 1				
Cadmium	2.0	0.52	mg/kg	SW846 6010B	07/18-07/19/05	HE4NK1AE
		Dilution Factor: 1				
Selenium	2.5	0.52	mg/kg	SW846 6010B	07/18-07/19/05	HE4NK1AN
		Dilution Factor: 1				
Chromium	18.3	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4NK1AF
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4NK1AP
		Dilution Factor: 1				
Copper	1610 J	2.6	mg/kg	SW846 6010B	07/18-07/19/05	HE4NK1AG
		Dilution Factor: 1				
Nickel	15.8	4.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4NK1AH
		Dilution Factor: 1				
Silver	0.52 B	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4NK1AJ
		Dilution Factor: 1				
Zinc	1180 J	21.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4NK1AK
		Dilution Factor: 10				
Mercury	0.62	0.10	mg/kg	SW846 7471A	07/18/05	HE4NK1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-036

General Chemistry

Lot-Sample #...: A5G080236-036 Work Order #...: HE4NK Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 4.5

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	95.5	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5192598

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-037

TOTAL Metals

Lot-Sample #...: A5G080236-037 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 19

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199041						
Arsenic	6.8	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4NM1AL
		Dilution Factor: 1				
Antimony	ND	7.4	mg/kg	SW846 6010B	07/18-07/19/05	HE4NM1AC
		Dilution Factor: 1				
Beryllium	0.79 J	0.62	mg/kg	SW846 6010B	07/18-07/19/05	HE4NM1AD
		Dilution Factor: 1				
Lead	192	0.37	mg/kg	SW846 6010B	07/18-07/19/05	HE4NM1AM
		Dilution Factor: 1				
Cadmium	0.81	0.62	mg/kg	SW846 6010B	07/18-07/19/05	HE4NM1AE
		Dilution Factor: 1				
Selenium	ND	0.62	mg/kg	SW846 6010B	07/18-07/19/05	HE4NM1AN
		Dilution Factor: 1				
Chromium	13.4	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4NM1AF
		Dilution Factor: 1				
Thallium	ND	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4NM1AP
		Dilution Factor: 1				
Copper	29.2 J	3.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4NM1AG
		Dilution Factor: 1				
Nickel	16.2	4.9	mg/kg	SW846 6010B	07/18-07/19/05	HE4NM1AH
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4NM1AJ
		Dilution Factor: 1				
Zinc	140 J	2.5	mg/kg	SW846 6010B	07/18-07/19/05	HE4NM1AK
		Dilution Factor: 1				
Mercury	0.37	0.12	mg/kg	SW846 7471A	07/18/05	HE4NM1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-037

General Chemistry

Lot-Sample #...: A5G080236-037 Work Order #...: HE4NM Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 19

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	81.1	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5192598

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-038

TOTAL Metals

Lot-Sample #...: A5G080236-038 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199041						
Arsenic	3.4	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4NN1AL
		Dilution Factor: 1				
Antimony	ND	7.5	mg/kg	SW846 6010B	07/18-07/19/05	HE4NN1AC
		Dilution Factor: 1				
Beryllium	0.48 B,J	0.62	mg/kg	SW846 6010B	07/18-07/19/05	HE4NN1AD
		Dilution Factor: 1				
Lead	10.4	0.37	mg/kg	SW846 6010B	07/18-07/19/05	HE4NN1AM
		Dilution Factor: 1				
Cadmium	0.26 B	0.62	mg/kg	SW846 6010B	07/18-07/19/05	HE4NN1AE
		Dilution Factor: 1				
Selenium	ND	0.62	mg/kg	SW846 6010B	07/18-07/19/05	HE4NN1AN
		Dilution Factor: 1				
Chromium	9.8	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4NN1AF
		Dilution Factor: 1				
Thallium	ND	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4NN1AP
		Dilution Factor: 1				
Copper	16.3 J	3.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4NN1AG
		Dilution Factor: 1				
Nickel	13.9	5.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4NN1AH
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4NN1AJ
		Dilution Factor: 1				
Zinc	41.1 J	2.5	mg/kg	SW846 6010B	07/18-07/19/05	HE4NN1AK
		Dilution Factor: 1				
Mercury	0.018 B	0.12	mg/kg	SW846 7471A	07/18/05	HE4NN1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

I Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-038

General Chemistry

Lot-Sample #...: A5G080236-038 Work Order #...: HE4NN Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 20

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	80.3	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5192598

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: W-070705-JH-039

TOTAL Metals

Lot-Sample #...: A5G080236-039 Matrix.....: WG
Date Sampled...: 07/07/05 Date Received..: 07/08/05

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5193022						
Mercury	ND	0.00020	mg/L	SW846 7470A	07/12/05	HE4NQ1AP
		Dilution Factor: 1				
Arsenic	ND	0.010	mg/L	SW846 6010B	07/12-07/17/05	HE4NQ1AK
		Dilution Factor: 1				
Antimony	ND	0.060	mg/L	SW846 6010B	07/12-07/17/05	HE4NQ1AA
		Dilution Factor: 1				
Beryllium	ND	0.0050	mg/L	SW846 6010B	07/12-07/17/05	HE4NQ1AC
		Dilution Factor: 1				
Lead	ND	0.0030	mg/L	SW846 6010B	07/12-07/17/05	HE4NQ1AL
		Dilution Factor: 1				
Cadmium	ND	0.0050	mg/L	SW846 6010B	07/12-07/17/05	HE4NQ1AD
		Dilution Factor: 1				
Selenium	ND	0.0050	mg/L	SW846 6010B	07/12-07/17/05	HE4NQ1AM
		Dilution Factor: 1				
Chromium	ND	0.010	mg/L	SW846 6010B	07/12-07/17/05	HE4NQ1AE
		Dilution Factor: 1				
Thallium	ND	0.010	mg/L	SW846 6010B	07/12-07/17/05	HE4NQ1AN
		Dilution Factor: 1				
Copper	ND	0.025	mg/L	SW846 6010B	07/12-07/17/05	HE4NQ1AF
		Dilution Factor: 1				
Nickel	ND	0.040	mg/L	SW846 6010B	07/12-07/17/05	HE4NQ1AG
		Dilution Factor: 1				
Silver	ND	0.010	mg/L	SW846 6010B	07/12-07/17/05	HE4NQ1AH
		Dilution Factor: 1				
Zinc	ND	0.020	mg/L	SW846 6010B	07/12-07/17/05	HE4NQ1AJ
		Dilution Factor: 1				

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-040

TOTAL Metals

Lot-Sample #...: A5G080236-040 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 3.5

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199041						
Arsenic	5.0	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4N11AL
		Dilution Factor: 1				
Antimony	22.2	6.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4N11AC
		Dilution Factor: 1				
Beryllium	6.3 J	0.52	mg/kg	SW846 6010B	07/18-07/19/05	HE4N11AD
		Dilution Factor: 1				
Lead	4540	15.5	mg/kg	SW846 6010B	07/18-07/19/05	HE4N11AM
		Dilution Factor: 50				
Cadmium	13.2	0.52	mg/kg	SW846 6010B	07/18-07/19/05	HE4N11AE
		Dilution Factor: 1				
lenium	27.8	0.52	mg/kg	SW846 6010B	07/18-07/19/05	HE4N11AN
		Dilution Factor: 1				
Chromium	153	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4N11AF
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4N11AP
		Dilution Factor: 1				
Copper	27000 J	130	mg/kg	SW846 6010B	07/18-07/19/05	HE4N11AG
		Dilution Factor: 50				
Nickel	196	4.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4N11AH
		Dilution Factor: 1				
Silver	8.1	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4N11AJ
		Dilution Factor: 1				
Zinc	12100 J	104	mg/kg	SW846 6010B	07/18-07/19/05	HE4N11AK
		Dilution Factor: 50				
Mercury	0.94	0.10	mg/kg	SW846 7471A	07/18/05	HE4N11AQ
		Dilution Factor: 1				

NOTE(S):

ults and reporting limits have been adjusted for dry weight.

ethod blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-040

General Chemistry

Lot-Sample #...: A5G080236-040 Work Order #...: HE4N1 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 3.5

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	96.5	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5192598

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-041

TOTAL Metals

Lot-Sample #...: A5G080236-041 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 14

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199041						
Arsenic	5.9	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4PE1AL
		Dilution Factor: 1				
Antimony	1.1 B	7.0	mg/kg	SW846 6010B	07/18-07/19/05	HE4PE1AC
		Dilution Factor: 1				
Beryllium	0.54 B,J	0.58	mg/kg	SW846 6010B	07/18-07/19/05	HE4PE1AD
		Dilution Factor: 1				
Lead	95.7	0.35	mg/kg	SW846 6010B	07/18-07/19/05	HE4PE1AM
		Dilution Factor: 1				
Cadmium	0.70	0.58	mg/kg	SW846 6010B	07/18-07/19/05	HE4PE1AE
		Dilution Factor: 1				
lenium	15.6	0.58	mg/kg	SW846 6010B	07/18-07/19/05	HE4PE1AN
		Dilution Factor: 1				
Chromium	8.0	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4PE1AF
		Dilution Factor: 1				
Thallium	1.2	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4PE1AP
		Dilution Factor: 1				
Copper	44.3 J	2.9	mg/kg	SW846 6010B	07/18-07/19/05	HE4PE1AG
		Dilution Factor: 1				
Nickel	6.5	4.7	mg/kg	SW846 6010B	07/18-07/19/05	HE4PE1AH
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4PE1AJ
		Dilution Factor: 1				
Zinc	79.7 J	2.3	mg/kg	SW846 6010B	07/18-07/19/05	HE4PE1AK
		Dilution Factor: 1				
Mercury	0.55	0.12	mg/kg	SW846 7471A	07/18/05	HE4PE1AQ
		Dilution Factor: 1				

NOTE(S):

esults and reporting limits have been adjusted for dry weight.

Estimated result. Result is less than RL.

Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-041

General Chemistry

Lot-Sample #...: A5G080236-041 Work Order #...: HE4PE Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	85.8	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5192598

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-044

TOTAL Metals

Lot-Sample #...: A5G080236-042 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 13

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199041						
Arsenic	3.8	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4PG1AL
		Dilution Factor: 1				
Antimony	0.57 B	6.9	mg/kg	SW846 6010B	07/18-07/19/05	HE4PG1AC
		Dilution Factor: 1				
Beryllium	0.69 J,E	0.57	mg/kg	SW846 6010B	07/18-07/19/05	HE4PG1AD
		Dilution Factor: 1				
Lead	664	0.34	mg/kg	SW846 6010B	07/18-07/19/05	HE4PG1AM
		Dilution Factor: 1				
Cadmium	0.46 B	0.57	mg/kg	SW846 6010B	07/18-07/19/05	HE4PG1AE
		Dilution Factor: 1				
enium	0.37 B	0.57	mg/kg	SW846 6010B	07/18-07/19/05	HE4PG1AN
		Dilution Factor: 1				
Chromium	11.3	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4PG1AF
		Dilution Factor: 1				
Thallium	ND	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4PG1AP
		Dilution Factor: 1				
Copper	36.2 J	2.9	mg/kg	SW846 6010B	07/18-07/19/05	HE4PG1AG
		Dilution Factor: 1				
Nickel	9.4	4.6	mg/kg	SW846 6010B	07/18-07/19/05	HE4PG1AH
		Dilution Factor: 1				
Silver	ND	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE4PG1AJ
		Dilution Factor: 1				
Zinc	37.6 J	2.3	mg/kg	SW846 6010B	07/18-07/19/05	HE4PG1AK
		Dilution Factor: 1				
Mercury	0.59	0.11	mg/kg	SW846 7471A	07/18/05	HE4PG1AQ
		Dilution Factor: 1				

(Continued on next page)

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-044

TOTAL Metals

Lot-Sample #....: A5G080236-042 Matrix.....: SO

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

E Matrix interference.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-044

General Chemistry

Lot-Sample #...: A5G080236-042 Work Order #...: HE4PG Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 13

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	87.0	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5192598

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-045

TOTAL Metals

Lot-Sample #...: A5G080236-043 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 16

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199033						
Arsenic	6.0	1.2	mg/kg	SW846 6010B	07/18/05	HE4PM1AL
		Dilution Factor: 1				
Antimony	ND	7.2	mg/kg	SW846 6010B	07/18/05	HE4PM1AC
		Dilution Factor: 1				
Beryllium	0.26 B,J	0.60	mg/kg	SW846 6010B	07/18/05	HE4PM1AD
		Dilution Factor: 1				
Lead	6.1	0.36	mg/kg	SW846 6010B	07/18/05	HE4PM1AM
		Dilution Factor: 1				
Cadmium	0.29 B	0.60	mg/kg	SW846 6010B	07/18/05	HE4PM1AE
		Dilution Factor: 1				
enium	ND	0.60	mg/kg	SW846 6010B	07/18/05	HE4PM1AN
		Dilution Factor: 1				
Chromium	7.1	1.2	mg/kg	SW846 6010B	07/18/05	HE4PM1AF
		Dilution Factor: 1				
Thallium	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4PM1AP
		Dilution Factor: 1				
Copper	7.8	3.0	mg/kg	SW846 6010B	07/18/05	HE4PM1AG
		Dilution Factor: 1				
Nickel	8.7	4.8	mg/kg	SW846 6010B	07/18/05	HE4PM1AH
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4PM1AJ
		Dilution Factor: 1				
Zinc	26.8	2.4	mg/kg	SW846 6010B	07/18/05	HE4PM1AK
		Dilution Factor: 1				
Mercury	ND	0.12	mg/kg	SW846 7471A	07/18/05	HE4PM1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

imated result. Result is less than RL.

od blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-045

General Chemistry

Lot-Sample #...: A5G080236-043 Work Order #...: HE4PM Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 16

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	83.5	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5192598

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-046

TOTAL Metals

Lot-Sample #...: A5G080236-044 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 4.5

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199033						
Arsenic	3.3	1.0	mg/kg	SW846 6010B	07/18/05	HE4PT1AL
		Dilution Factor: 1				
Antimony	1.1 B	6.3	mg/kg	SW846 6010B	07/18/05	HE4PT1AC
		Dilution Factor: 1				
Beryllium	2.5 J	0.52	mg/kg	SW846 6010B	07/18/05	HE4PT1AD
		Dilution Factor: 1				
Lead	1410	0.31	mg/kg	SW846 6010B	07/18/05	HE4PT1AM
		Dilution Factor: 1				
Cadmium	7.1	0.52	mg/kg	SW846 6010B	07/18/05	HE4PT1AE
		Dilution Factor: 1				
enium	5.3	0.52	mg/kg	SW846 6010B	07/18/05	HE4PT1AN
		Dilution Factor: 1				
Chromium	23.1	1.0	mg/kg	SW846 6010B	07/18/05	HE4PT1AF
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18/05	HE4PT1AP
		Dilution Factor: 1				
Copper	3410	2.6	mg/kg	SW846 6010B	07/18/05	HE4PT1AG
		Dilution Factor: 1				
Nickel	36.5	4.2	mg/kg	SW846 6010B	07/18/05	HE4PT1AH
		Dilution Factor: 1				
Silver	1.1	1.0	mg/kg	SW846 6010B	07/18/05	HE4PT1AJ
		Dilution Factor: 1				
Zinc	5160	20.9	mg/kg	SW846 6010B	07/18-07/19/05	HE4PT1AK
		Dilution Factor: 10				
Mercury	0.14	0.10	mg/kg	SW846 7471A	07/18/05	HE4PT1AQ
		Dilution Factor: 1				

NOTE(S):

ts and reporting limits have been adjusted for dry weight.

imated result. Result is less than RL.

J ...ethod blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-046

General Chemistry

Lot-Sample #...: A5G080236-044 Work Order #...: HE4PT Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 4.5

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	95.5	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5192598

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-047

TOTAL Metals

Lot-Sample #...: A5G080236-045 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 24

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199033						
Arsenic	31.1	1.3	mg/kg	SW846 6010B	07/18/05	HE4PV1AL
		Dilution Factor: 1				
Antimony	6.0 B	7.9	mg/kg	SW846 6010B	07/18/05	HE4PV1AC
		Dilution Factor: 1				
Beryllium	1.0 J	0.65	mg/kg	SW846 6010B	07/18/05	HE4PV1AD
		Dilution Factor: 1				
Lead	525	0.79	mg/kg	SW846 6010B	07/18-07/19/05	HE4PV1AM
		Dilution Factor: 2				
Cadmium	5.8	0.65	mg/kg	SW846 6010B	07/18/05	HE4PV1AE
		Dilution Factor: 1				
lenium	10.4	1.3	mg/kg	SW846 6010B	07/18-07/19/05	HE4PV1AN
		Dilution Factor: 2				
Chromium	21.4	1.3	mg/kg	SW846 6010B	07/18/05	HE4PV1AF
		Dilution Factor: 1				
Thallium	ND G	2.6	mg/kg	SW846 6010B	07/18-07/19/05	HE4PV1AP
		Dilution Factor: 2				
Copper	420	3.3	mg/kg	SW846 6010B	07/18/05	HE4PV1AG
		Dilution Factor: 1				
Nickel	42.8	5.2	mg/kg	SW846 6010B	07/18/05	HE4PV1AH
		Dilution Factor: 1				
Silver	ND G	2.6	mg/kg	SW846 6010B	07/18-07/19/05	HE4PV1AJ
		Dilution Factor: 2				
Zinc	1710	5.2	mg/kg	SW846 6010B	07/18-07/19/05	HE4PV1AK
		Dilution Factor: 2				
Mercury	0.73	0.13	mg/kg	SW846 7471A	07/18/05	HE4PV1AQ
		Dilution Factor: 1				

(Continued on next page)

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-047

TOTAL Metals

Lot-Sample #...: A5G080236-045 Matrix.....: SO

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

G Elevated reporting limit. The reporting limit is elevated due to matrix interference.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-047

General Chemistry

Lot-Sample #...: A5G080236-045 Work Order #...: HE4PV Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 24

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	76.4	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5192598

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-048

TOTAL Metals

Lot-Sample #...: A5G080236-046 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199033						
Arsenic	3.3	1.2	mg/kg	SW846 6010B	07/18/05	HE4PW1AL
		Dilution Factor: 1				
Antimony	ND	7.5	mg/kg	SW846 6010B	07/18/05	HE4PW1AC
		Dilution Factor: 1				
Beryllium	0.27 B,J	0.62	mg/kg	SW846 6010B	07/18/05	HE4PW1AD
		Dilution Factor: 1				
Lead	6.1	0.37	mg/kg	SW846 6010B	07/18/05	HE4PW1AM
		Dilution Factor: 1				
Cadmium	0.23 B	0.62	mg/kg	SW846 6010B	07/18/05	HE4PW1AE
		Dilution Factor: 1				
Selenium	ND	0.62	mg/kg	SW846 6010B	07/18/05	HE4PW1AN
		Dilution Factor: 1				
Chromium	7.7	1.2	mg/kg	SW846 6010B	07/18/05	HE4PW1AF
		Dilution Factor: 1				
Thallium	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4PW1AP
		Dilution Factor: 1				
Copper	10	3.1	mg/kg	SW846 6010B	07/18/05	HE4PW1AG
		Dilution Factor: 1				
Nickel	8.5	5.0	mg/kg	SW846 6010B	07/18/05	HE4PW1AH
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4PW1AJ
		Dilution Factor: 1				
Zinc	30.1	2.5	mg/kg	SW846 6010B	07/18/05	HE4PW1AK
		Dilution Factor: 1				
Mercury	ND	0.12	mg/kg	SW846 7471A	07/18/05	HE4PW1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Estimated result. Result is less than RL.

Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-048

General Chemistry

Lot-Sample #...: A5G080236-046 Work Order #...: HE4PW Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 20

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	80.4	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5192598

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-049

TOTAL Metals

Lot-Sample #...: A5G080236-047 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 8.6

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199033						
Arsenic	15.1	1.1	mg/kg	SW846 6010B	07/18/05	HE4PX1AL
		Dilution Factor: 1				
Antimony	ND	6.6	mg/kg	SW846 6010B	07/18/05	HE4PX1AC
		Dilution Factor: 1				
Beryllium	0.73 J	0.55	mg/kg	SW846 6010B	07/18/05	HE4PX1AD
		Dilution Factor: 1				
Lead	44.2	0.33	mg/kg	SW846 6010B	07/18/05	HE4PX1AM
		Dilution Factor: 1				
Cadmium	1.4	0.55	mg/kg	SW846 6010B	07/18/05	HE4PX1AE
		Dilution Factor: 1				
Selenium	ND	0.55	mg/kg	SW846 6010B	07/18/05	HE4PX1AN
		Dilution Factor: 1				
Chromium	16.4	1.1	mg/kg	SW846 6010B	07/18/05	HE4PX1AF
		Dilution Factor: 1				
Thallium	ND	1.1	mg/kg	SW846 6010B	07/18/05	HE4PX1AP
		Dilution Factor: 1				
Copper	33.3	2.7	mg/kg	SW846 6010B	07/18/05	HE4PX1AG
		Dilution Factor: 1				
Nickel	19.5	4.4	mg/kg	SW846 6010B	07/18/05	HE4PX1AH
		Dilution Factor: 1				
Silver	ND	1.1	mg/kg	SW846 6010B	07/18/05	HE4PX1AJ
		Dilution Factor: 1				
Zinc	139	2.2	mg/kg	SW846 6010B	07/18/05	HE4PX1AK
		Dilution Factor: 1				
Mercury	0.080 B	0.11	mg/kg	SW846 7471A	07/18/05	HE4PX1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-049

General Chemistry

Lot-Sample #...: A5G080236-047 Work Order #...: HE4PX Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 8.6

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	91.4	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5192598

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-050

TOTAL Metals

Lot-Sample #...: A5G080236-048 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 6.4

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199033						
Arsenic	25.8	1.1	mg/kg	SW846 6010B	07/18/05	HE4P01AL
		Dilution Factor: 1				
Antimony	4.1 B	6.4	mg/kg	SW846 6010B	07/18/05	HE4P01AC
		Dilution Factor: 1				
Beryllium	0.63 J	0.53	mg/kg	SW846 6010B	07/18/05	HE4P01AD
		Dilution Factor: 1				
Lead	153	0.32	mg/kg	SW846 6010B	07/18/05	HE4P01AM
		Dilution Factor: 1				
Cadmium	1.7	0.53	mg/kg	SW846 6010B	07/18/05	HE4P01AE
		Dilution Factor: 1				
Selenium	ND	0.53	mg/kg	SW846 6010B	07/18/05	HE4P01AN
		Dilution Factor: 1				
Chromium	20.3	1.1	mg/kg	SW846 6010B	07/18/05	HE4P01AF
		Dilution Factor: 1				
Thallium	ND	1.1	mg/kg	SW846 6010B	07/18/05	HE4P01AP
		Dilution Factor: 1				
Copper	178	2.7	mg/kg	SW846 6010B	07/18/05	HE4P01AG
		Dilution Factor: 1				
Nickel	28.0	4.3	mg/kg	SW846 6010B	07/18/05	HE4P01AH
		Dilution Factor: 1				
Silver	0.48 B	1.1	mg/kg	SW846 6010B	07/18/05	HE4P01AJ
		Dilution Factor: 1				
Zinc	1040	2.1	mg/kg	SW846 6010B	07/18/05	HE4P01AK
		Dilution Factor: 1				
Mercury	0.14	0.11	mg/kg	SW846 7471A	07/18/05	HE4P01AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Estimated result. Result is less than RL.

B Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-050

General Chemistry

Lot-Sample #...: A5G080236-048 Work Order #...: HE4P0 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 6.4

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	93.6	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5192598

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-042

TOTAL Metals

Lot-Sample #...: A5G080236-049 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 16

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199033						
Arsenic	6.3	1.2	mg/kg	SW846 6010B	07/18/05	HE4451AL
		Dilution Factor: 1				
Antimony	ND	7.2	mg/kg	SW846 6010B	07/18/05	HE4451AC
		Dilution Factor: 1				
Beryllium	0.53 B,J	0.60	mg/kg	SW846 6010B	07/18/05	HE4451AD
		Dilution Factor: 1				
Lead	12.9	0.36	mg/kg	SW846 6010B	07/18/05	HE4451AM
		Dilution Factor: 1				
Cadmium	0.23 B	0.60	mg/kg	SW846 6010B	07/18/05	HE4451AE
		Dilution Factor: 1				
Selenium	ND	0.60	mg/kg	SW846 6010B	07/18/05	HE4451AN
		Dilution Factor: 1				
Chromium	13.9	1.2	mg/kg	SW846 6010B	07/18/05	HE4451AF
		Dilution Factor: 1				
Thallium	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4451AP
		Dilution Factor: 1				
Copper	17.4	3.0	mg/kg	SW846 6010B	07/18/05	HE4451AG
		Dilution Factor: 1				
Nickel	20.1	4.8	mg/kg	SW846 6010B	07/18/05	HE4451AH
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE4451AJ
		Dilution Factor: 1				
Zinc	38.9	2.4	mg/kg	SW846 6010B	07/18/05	HE4451AK
		Dilution Factor: 1				
Mercury	ND	0.12	mg/kg	SW846 7471A	07/18/05	HE4451AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Estimated result. Result is less than RL.

Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-043

TOTAL Metals

Lot-Sample #...: A5G080236-050 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 3.1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199033						
Arsenic	2.1	1.0	mg/kg	SW846 6010B	07/18/05	HE4471AL
		Dilution Factor: 1				
Antimony	0.46 B	6.2	mg/kg	SW846 6010B	07/18/05	HE4471AC
		Dilution Factor: 1				
Beryllium	1.1 J	0.52	mg/kg	SW846 6010B	07/18/05	HE4471AD
		Dilution Factor: 1				
Lead	242	1.5	mg/kg	SW846 6010B	07/18-07/19/05	HE4471AM
		Dilution Factor: 5				
Cadmium	1.3	0.52	mg/kg	SW846 6010B	07/18/05	HE4471AE
		Dilution Factor: 1				
enium	0.62	0.52	mg/kg	SW846 6010B	07/18/05	HE4471AN
		Dilution Factor: 1				
Chromium	13.6	1.0	mg/kg	SW846 6010B	07/18/05	HE4471AF
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18/05	HE4471AP
		Dilution Factor: 1				
Copper	13400	12.9	mg/kg	SW846 6010B	07/18-07/19/05	HE4471AG
		Dilution Factor: 5				
Nickel	18.5	4.1	mg/kg	SW846 6010B	07/18/05	HE4471AH
		Dilution Factor: 1				
Silver	0.97 B	1.0	mg/kg	SW846 6010B	07/18/05	HE4471AJ
		Dilution Factor: 1				
Zinc	1180	10.3	mg/kg	SW846 6010B	07/18-07/19/05	HE4471AK
		Dilution Factor: 5				
Mercury	ND	0.10	mg/kg	SW846 7471A	07/18/05	HE4471AQ
		Dilution Factor: 1				

NOTE(S):

and reporting limits have been adjusted for dry weight.

imated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-042

General Chemistry

Lot-Sample #...: A5G080236-049 Work Order #...: HE445 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 16

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	83.8	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5192598

Dilution Factor: 1

SEVERN TRENT STL

QUALITY CONTROL SECTION

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070705-JH-043

General Chemistry

Lot-Sample #...: A5G080236-050 Work Order #...: HE447 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05
% Moisture.....: 3.1

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	96.9	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5192598

Dilution Factor: 1

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A5G080236 Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A5G120000-022 Prep Batch #...: 5193022						
Mercury	ND	0.00020	mg/L	SW846 7470A	07/12/05	HE87M1A1
		Dilution Factor: 1				
Antimony	ND	0.060	mg/L	SW846 6010B	07/12-07/17/05	HE87M1CR
		Dilution Factor: 1				
Arsenic	ND	0.010	mg/L	SW846 6010B	07/12-07/17/05	HE87M1AC
		Dilution Factor: 1				
Beryllium	ND	0.0050	mg/L	SW846 6010B	07/12-07/17/05	HE87M1AM
		Dilution Factor: 1				
Lead	ND	0.0030	mg/L	SW846 6010B	07/12-07/17/05	HE87M1AF
		Dilution Factor: 1				
Cadmium	ND	0.0050	mg/L	SW846 6010B	07/12-07/17/05	HE87M1CU
		Dilution Factor: 1				
enium	ND	0.0050	mg/L	SW846 6010B	07/12-07/17/05	HE87M1AG
		Dilution Factor: 1				
Chromium	ND	0.010	mg/L	SW846 6010B	07/12-07/17/05	HE87M1CV
		Dilution Factor: 1				
Thallium	ND	0.010	mg/L	SW846 6010B	07/12-07/17/05	HE87M1C3
		Dilution Factor: 1				
Copper	ND	0.025	mg/L	SW846 6010B	07/12-07/17/05	HE87M1AQ
		Dilution Factor: 1				
Nickel	ND	0.040	mg/L	SW846 6010B	07/12-07/17/05	HE87M1AV
		Dilution Factor: 1				
Silver	ND	0.010	mg/L	SW846 6010B	07/12-07/17/05	HE87M1C0
		Dilution Factor: 1				
Zinc	0.0096 B	0.020	mg/L	SW846 6010B	07/12-07/17/05	HE87M1A0
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TOTAL Metals

:lient Lot #...: A5G080236 Matrix.....: SOLID

?ARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
IB Lot-Sample #: A5G180000-033 Prep Batch #...: 5199033						
ntimony	ND	6.0	mg/kg	SW846 6010B	07/18/05	HFNTD1AA
		Dilution Factor: 1				
rsenic	ND	1.0	mg/kg	SW846 6010B	07/18/05	HFNTD1AK
		Dilution Factor: 1				
eryllium	0.052 B	0.50	mg/kg	SW846 6010B	07/18/05	HFNTD1AC
		Dilution Factor: 1				
ead	ND	0.30	mg/kg	SW846 6010B	07/18/05	HFNTD1AL
		Dilution Factor: 1				
admium	ND	0.50	mg/kg	SW846 6010B	07/18/05	HFNTD1AD
		Dilution Factor: 1				
elenium	ND	0.50	mg/kg	SW846 6010B	07/18/05	HFNTD1AM
		Dilution Factor: 1				
romium	ND	1.0	mg/kg	SW846 6010B	07/18/05	HFNTD1AE
		Dilution Factor: 1				
allium	ND	1.0	mg/kg	SW846 6010B	07/18/05	HFNTD1AN
		Dilution Factor: 1				
pper	ND	2.5	mg/kg	SW846 6010B	07/18/05	HFNTD1AF
		Dilution Factor: 1				
ckel	ND	4.0	mg/kg	SW846 6010B	07/18/05	HFNTD1AG
		Dilution Factor: 1				
lver	ND	1.0	mg/kg	SW846 6010B	07/18/05	HFNTD1AH
		Dilution Factor: 1				
nc	ND	2.0	mg/kg	SW846 6010B	07/18/05	HFNTD1AJ
		Dilution Factor: 1				
rcury	ND	0.10	mg/kg	SW846 7471A	07/18/05	HFNTD1AP
		Dilution Factor: 1				

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A5G080236 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A5G180000-035 Prep Batch #...: 5199035						
Antimony	ND	6.0	mg/kg	SW846 6010B	07/18/05	HFNTH1AA
		Dilution Factor: 1				
Arsenic	ND	1.0	mg/kg	SW846 6010B	07/18/05	HFNTH1AK
		Dilution Factor: 1				
Beryllium	0.059 B	0.50	mg/kg	SW846 6010B	07/18/05	HFNTH1AC
		Dilution Factor: 1				
Lead	ND	0.30	mg/kg	SW846 6010B	07/18/05	HFNTH1AL
		Dilution Factor: 1				
Cadmium	ND	0.50	mg/kg	SW846 6010B	07/18/05	HFNTH1AD
		Dilution Factor: 1				
Selenium	ND	0.50	mg/kg	SW846 6010B	07/18/05	HFNTH1AM
		Dilution Factor: 1				
omium	ND	1.0	mg/kg	SW846 6010B	07/18/05	HFNTH1AE
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18/05	HFNTH1AN
		Dilution Factor: 1				
Copper	ND	2.5	mg/kg	SW846 6010B	07/18/05	HFNTH1AF
		Dilution Factor: 1				
Nickel	ND	4.0	mg/kg	SW846 6010B	07/18/05	HFNTH1AG
		Dilution Factor: 1				
Silver	ND	1.0	mg/kg	SW846 6010B	07/18/05	HFNTH1AH
		Dilution Factor: 1				
Zinc	ND	2.0	mg/kg	SW846 6010B	07/18/05	HFNTH1AJ
		Dilution Factor: 1				
Mercury	ND	0.10	mg/kg	SW846 7471A	07/18/05	HFNTH1AP
		Dilution Factor: 1				
MB Lot-Sample #: A5G180000-041 Prep Batch #...: 5199041						
Antimony	ND	6.0	mg/kg	SW846 6010B	07/18/05	HFNTP1AA
		Dilution Factor: 1				

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METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A5G080236 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Arsenic	ND	1.0	mg/kg	SW846 6010B	07/18/05	HFNTP1AK
		Dilution Factor: 1				
Beryllium	0.078 B	0.50	mg/kg	SW846 6010B	07/18/05	HFNTP1AC
		Dilution Factor: 1				
Lead	ND	0.30	mg/kg	SW846 6010B	07/18-07/19/05	HFNTP1AL
		Dilution Factor: 1				
Cadmium	ND	0.50	mg/kg	SW846 6010B	07/18/05	HFNTP1AD
		Dilution Factor: 1				
Selenium	ND	0.50	mg/kg	SW846 6010B	07/18/05	HFNTP1AM
		Dilution Factor: 1				
Chromium	ND	1.0	mg/kg	SW846 6010B	07/18/05	HFNTP1AE
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18/05	HFNTP1AN
		Dilution Factor: 1				
Copper	1.2 B	2.5	mg/kg	SW846 6010B	07/18-07/19/05	HFNTP1AF
		Dilution Factor: 1				
Nickel	ND	4.0	mg/kg	SW846 6010B	07/18/05	HFNTP1AG
		Dilution Factor: 1				
Silver	ND	1.0	mg/kg	SW846 6010B	07/18/05	HFNTP1AH
		Dilution Factor: 1				
Zinc	1.6 B	2.0	mg/kg	SW846 6010B	07/18/05	HFNTP1AJ
		Dilution Factor: 1				
Mercury	ND	0.10	mg/kg	SW846 7471A	07/18/05	HFNTP1AP
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A5G080236 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids		Work Order #: HE9DE1AA		MB Lot-Sample #:	A5G080000-400	
	ND	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189400
		Dilution Factor: 1				
Percent Solids		Work Order #: HE9DF1AA		MB Lot-Sample #:	A5G080000-401	
	ND	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5189401
		Dilution Factor: 1				
Percent Solids		Work Order #: HE9C51AA		MB Lot-Sample #:	A5G110000-598	
	ND	10.0	%	MCAWW 160.3 MOD	07/08-07/11/05	5192598
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A5G080236 Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A5G120000-022 Prep Batch #...: 5193022					
Mercury	99	(82 - 131)	SW846 7470A Dilution Factor: 1	07/12/05	HE87M1CQ
Arsenic	106	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/17/05	HE87M1A3
Antimony	106	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/17/05	HE87M1C5
Lead	104	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/17/05	HE87M1A6
Beryllium	107	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/17/05	HE87M1CD
Selenium	107	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/17/05	HE87M1A7
Cadmium	107	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/17/05	HE87M1C7
Chromium	107	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/17/05	HE87M1C8
Thallium	104	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/17/05	HE87M1DF
Copper	111	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/17/05	HE87M1CG
Nickel	108	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/17/05	HE87M1CL
Silver	119	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/17/05	HE87M1DC
Zinc	108	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/17/05	HE87M1CP

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A5G080236 Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A5G180000-033 Prep Batch #...: 5199033					
Antimony	91	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1AQ
Arsenic	92	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1A1
Beryllium	101	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1AR
Lead	95	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1A2
Cadmium	97	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1AT
lenium	93	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1A3
Chromium	98	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1AU
Thallium	95	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1A4
Copper	101	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1AV
Nickel	91	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1AW
Silver	108	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1AX
Zinc	97	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1A0
Mercury	93	(73 - 123)	SW846 7471A Dilution Factor: 1	07/18/05	HFNTD1A5

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A5G080236 Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#:	A5G180000-035	Prep Batch #...: 5199035			
Antimony	89	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTH1AQ
Arsenic	89	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTH1A1
Beryllium	98	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTH1AR
Lead	92	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTH1A2
Cadmium	95	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTH1AT
Selenium	91	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTH1A3
Chromium	94	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTH1AU
Thallium	92	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTH1A4
Copper	107	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTH1AV
Nickel	90	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTH1AW
Silver	106	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTH1AX
Zinc*	95	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTH1A0
Mercury	94	(73 - 123)	SW846 7471A Dilution Factor: 1	07/18/05	HFNTH1A5
LCS Lot-Sample#:	A5G180000-041	Prep Batch #...: 5199041			
Antimony	88	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTP1AQ

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LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A5G080236 Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Arsenic	87	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTP1A1
Beryllium	97	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTP1AR
Lead	90	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTP1A2
Cadmium	94	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTP1AT
Selenium	89	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTP1A3
Chromium	91	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTP1AU
...allium	90	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTP1A4
Copper	97	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTP1AV
Nickel	92	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTP1AW
Silver	104	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTP1AX
Zinc	93	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTP1A0
Mercury	90	(73 - 123)	SW846 7471A Dilution Factor: 1	07/18/05	HFNTP1A5

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A5G080236 Matrix.....: WATER
Date Sampled...: 07/06/05 08:05 Date Received..: 07/07/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A5G070131-001 Prep Batch #...: 5193022							
Mercury	102	(68 - 149)			SW846 7470A	07/12/05	HE1DD1DN
	100	(68 - 149)	2.2	(0-20)	SW846 7470A	07/12/05	HE1DD1DP
		Dilution Factor: 1					
Antimony	107	(75 - 125)			SW846 6010B	07/12-07/17/05	HE1DD1DR
	111	(75 - 125)	3.6	(0-20)	SW846 6010B	07/12-07/17/05	HE1DD1DT
		Dilution Factor: 1					
Arsenic	105	(75 - 125)			SW846 6010B	07/12-07/17/05	HE1DD1CC
	110	(75 - 125)	3.9	(0-20)	SW846 6010B	07/12-07/17/05	HE1DD1CD
		Dilution Factor: 1					
Beryllium	105	(75 - 125)			SW846 6010B	07/12-07/17/05	HE1DD1CX
	110	(75 - 125)	4.0	(0-20)	SW846 6010B	07/12-07/17/05	HE1DD1C0
		Dilution Factor: 1					
Lead	102	(75 - 125)			SW846 6010B	07/12-07/17/05	HE1DD1CJ
	107	(75 - 125)	4.3	(0-20)	SW846 6010B	07/12-07/17/05	HE1DD1CK
		Dilution Factor: 1					
Cadmium	104	(75 - 125)			SW846 6010B	07/12-07/17/05	HE1DD1D0
	109	(75 - 125)	4.1	(0-20)	SW846 6010B	07/12-07/17/05	HE1DD1D1
		Dilution Factor: 1					
Selenium	106	(75 - 125)			SW846 6010B	07/12-07/17/05	HE1DD1CL
	111	(75 - 125)	4.0	(0-20)	SW846 6010B	07/12-07/17/05	HE1DD1CM
		Dilution Factor: 1					
Chromium	106	(75 - 125)			SW846 6010B	07/12-07/17/05	HE1DD1D3
	110	(75 - 125)	4.3	(0-20)	SW846 6010B	07/12-07/17/05	HE1DD1D4
		Dilution Factor: 1					
Thallium	103	(75 - 125)			SW846 6010B	07/12-07/17/05	HE1DD1EN
	108	(75 - 125)	4.4	(0-20)	SW846 6010B	07/12-07/17/05	HE1DD1EP
		Dilution Factor: 1					
Copper	109	(75 - 125)			SW846 6010B	07/12-07/17/05	HE1DD1C5
	113	(75 - 125)	4.1	(0-20)	SW846 6010B	07/12-07/17/05	HE1DD1C6
		Dilution Factor: 1					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A5G080236 Matrix.....: WATER
Date Sampled...: 07/06/05 08:05 Date Received..: 07/07/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Nickel	104	(75 - 125)			SW846 6010B	07/12-07/17/05	HE1DD1DE
	108	(75 - 125)	3.6	(0-20)	SW846 6010B	07/12-07/17/05	HE1DD1DF
		Dilution Factor: 1					
Silver	118	(75 - 125)			SW846 6010B	07/12-07/17/05	HE1DD1ED
	123	(75 - 125)	4.1	(0-20)	SW846 6010B	07/12-07/17/05	HE1DD1EE
		Dilution Factor: 1					
Zinc	107	(75 - 125)			SW846 6010B	07/12-07/17/05	HE1DD1DL
	111	(75 - 125)	3.6	(0-20)	SW846 6010B	07/12-07/17/05	HE1DD1DM
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A5G080236 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A5G080236-043 Prep Batch #...: 5199033							
Antimony	65 N	(75 - 125)			SW846 6010B	07/18/05	HE4PM1AR
	66 N	(75 - 125)	2.2	(0-20)	SW846 6010B	07/18/05	HE4PM1AT
		Dilution Factor: 1					
Arsenic	87	(75 - 125)			SW846 6010B	07/18/05	HE4PM1CA
	84	(75 - 125)	2.7	(0-20)	SW846 6010B	07/18/05	HE4PM1CC
		Dilution Factor: 1					
Beryllium	94	(75 - 125)			SW846 6010B	07/18/05	HE4PM1AU
	92	(75 - 125)	2.8	(0-20)	SW846 6010B	07/18/05	HE4PM1AV
		Dilution Factor: 1					
Lead	85	(75 - 125)			SW846 6010B	07/18/05	HE4PM1CD
	82	(75 - 125)	3.0	(0-20)	SW846 6010B	07/18/05	HE4PM1CE
		Dilution Factor: 1					
Cadmium	85	(75 - 125)			SW846 6010B	07/18/05	HE4PM1AW
	83	(75 - 125)	2.6	(0-20)	SW846 6010B	07/18/05	HE4PM1AX
		Dilution Factor: 1					
Selenium	88	(75 - 125)			SW846 6010B	07/18/05	HE4PM1CF
	86	(75 - 125)	3.0	(0-20)	SW846 6010B	07/18/05	HE4PM1CG
		Dilution Factor: 1					
Chromium	94	(75 - 125)			SW846 6010B	07/18/05	HE4PM1A0
	90	(75 - 125)	3.1	(0-20)	SW846 6010B	07/18/05	HE4PM1A1
		Dilution Factor: 1					
Thallium	86	(75 - 125)			SW846 6010B	07/18/05	HE4PM1CH
	84	(75 - 125)	2.6	(0-20)	SW846 6010B	07/18/05	HE4PM1CJ
		Dilution Factor: 1					
Copper	91	(75 - 125)			SW846 6010B	07/18/05	HE4PM1A2
	87	(75 - 125)	3.4	(0-20)	SW846 6010B	07/18/05	HE4PM1A3
		Dilution Factor: 1					
Nickel	81	(75 - 125)			SW846 6010B	07/18/05	HE4PM1A4
	78	(75 - 125)	2.9	(0-20)	SW846 6010B	07/18/05	HE4PM1A5
		Dilution Factor: 1					

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MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A5G080236 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	106	(75 - 125)			SW846 6010B	07/18/05	HE4PM1A6
	103	(75 - 125)	2.9	(0-20)	SW846 6010B	07/18/05	HE4PM1A7
		Dilution Factor: 1					
Zinc	89	(75 - 125)			SW846 6010B	07/18/05	HE4PM1A8
	85	(75 - 125)	2.9	(0-20)	SW846 6010B	07/18/05	HE4PM1A9
		Dilution Factor: 1					
Mercury	104	(10 - 199)			SW846 7471A	07/18/05	HE4PM1CK
	293 N,*	(10 - 199)	95	(0-50)	SW846 7471A	07/18/05	HE4PM1CL
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

* Relative percent difference (RPD) is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A5G080236 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A5G080236-001 Prep Batch #...: 5199035							
Antimony	65 N	(75 - 125)			SW846 6010B	07/18/05	HE4J81AR
	56 N	(75 - 125)	14	(0-20)	SW846 6010B	07/18/05	HE4J81AT
		Dilution Factor: 1					
Arsenic	86	(75 - 125)			SW846 6010B	07/18/05	HE4J81CA
	85	(75 - 125)	1.7	(0-20)	SW846 6010B	07/18/05	HE4J81CC
		Dilution Factor: 1					
Beryllium	94	(75 - 125)			SW846 6010B	07/18/05	HE4J81AU
	93	(75 - 125)	1.2	(0-20)	SW846 6010B	07/18/05	HE4J81AV
		Dilution Factor: 1					
Lead	1150 N	(75 - 125)			SW846 6010B	07/18/05	HE4J81CD
	220 N,*	(75 - 125)	105	(0-20)	SW846 6010B	07/18/05	HE4J81CE
		Dilution Factor: 1					
Cadmium	127 N	(75 - 125)			SW846 6010B	07/18/05	HE4J81AW
	94 *	(75 - 125)	27	(0-20)	SW846 6010B	07/18/05	HE4J81AX
		Dilution Factor: 1					
Selenium	86	(75 - 125)			SW846 6010B	07/18/05	HE4J81CF
	84	(75 - 125)	2.2	(0-20)	SW846 6010B	07/18/05	HE4J81CG
		Dilution Factor: 1					
Chromium	92	(75 - 125)			SW846 6010B	07/18/05	HE4J81A0
	97	(75 - 125)	4.4	(0-20)	SW846 6010B	07/18/05	HE4J81A1
		Dilution Factor: 1					
Thallium	85	(75 - 125)			SW846 6010B	07/18/05	HE4J81CH
	84	(75 - 125)	1.2	(0-20)	SW846 6010B	07/18/05	HE4J81CJ
		Dilution Factor: 1					
Copper	294 N	(75 - 125)			SW846 6010B	07/18/05	HE4J81A2
	125 *	(75 - 125)	56	(0-20)	SW846 6010B	07/18/05	HE4J81A3
		Dilution Factor: 1					
Nickel	84	(75 - 125)			SW846 6010B	07/18/05	HE4J81A4
	86	(75 - 125)	2.0	(0-20)	SW846 6010B	07/18/05	HE4J81A5
		Dilution Factor: 1					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A5G080236 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	108	(75 - 125)			SW846 6010B	07/18/05	HE4J81A6
	101	(75 - 125)	6.6	(0-20)	SW846 6010B	07/18/05	HE4J81A7
		Dilution Factor: 1					
Zinc	NC,MSB	(75 - 125)			SW846 6010B	07/18-07/19/05	HE4J81A8
	NC,MSB	(75 - 125)		(0-20)	SW846 6010B	07/18/05	HE4J81A9
		Dilution Factor: 10					
Mercury	203 N	(10 - 199)			SW846 7471A	07/18/05	HE4J81CK
	123	(10 - 199)	27	(0-50)	SW846 7471A	07/18/05	HE4J81CL
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

* Relative percent difference (RPD) is outside stated control limits.

N Spiked analyte recovery is outside stated control limits.

NC The recovery and/or RPD were not calculated.

SB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A5G080236 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A5G080236-022 Prep Batch #...: 5199041							
Antimony	38 N	(75 - 125)			SW846 6010B	07/18-07/19/05	HE4MT1AR
	38 N	(75 - 125)	0.57	(0-20)	SW846 6010B	07/18-07/19/05	HE4MT1AT
		Dilution Factor: 1					
Arsenic	82	(75 - 125)			SW846 6010B	07/18-07/19/05	HE4MT1CA
	81	(75 - 125)	1.3	(0-20)	SW846 6010B	07/18-07/19/05	HE4MT1CC
		Dilution Factor: 1					
Beryllium	90	(75 - 125)			SW846 6010B	07/18-07/19/05	HE4MT1AU
	90	(75 - 125)	0.74	(0-20)	SW846 6010B	07/18-07/19/05	HE4MT1AV
		Dilution Factor: 1					
Lead	NC,MSB	(75 - 125)			SW846 6010B	07/18-07/19/05	HE4MT1CD
	NC,MSB	(75 - 125)		(0-20)	SW846 6010B	07/18-07/19/05	HE4MT1CE
		Dilution Factor: 1					
Cadmium	51 N	(75 - 125)			SW846 6010B	07/18-07/19/05	HE4MT1AW
	36 N	(75 - 125)	7.8	(0-20)	SW846 6010B	07/18-07/19/05	HE4MT1AX
		Dilution Factor: 1					
Selenium	85	(75 - 125)			SW846 6010B	07/18-07/19/05	HE4MT1CF
	84	(75 - 125)	1.0	(0-20)	SW846 6010B	07/18-07/19/05	HE4MT1CG
		Dilution Factor: 1					
Chromium	89	(75 - 125)			SW846 6010B	07/18-07/19/05	HE4MT1A0
	95	(75 - 125)	4.2	(0-20)	SW846 6010B	07/18-07/19/05	HE4MT1A1
		Dilution Factor: 1					
Thallium	83	(75 - 125)			SW846 6010B	07/18-07/19/05	HE4MT1CH
	82	(75 - 125)	1.4	(0-20)	SW846 6010B	07/18-07/19/05	HE4MT1CJ
		Dilution Factor: 1					
Copper	NC,MSB	(75 - 125)			SW846 6010B	07/18-07/19/05	HE4MT1A2
	NC,MSB	(75 - 125)		(0-20)	SW846 6010B	07/18-07/19/05	HE4MT1A3
		Dilution Factor: 1					
Nickel	78	(75 - 125)			SW846 6010B	07/18-07/19/05	HE4MT1A4
	76	(75 - 125)	1.8	(0-20)	SW846 6010B	07/18-07/19/05	HE4MT1A5
		Dilution Factor: 1					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A5G080236 Matrix.....: SO
Date Sampled...: 07/07/05 Date Received..: 07/08/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	104	(75 - 125)			SW846 6010B	07/18-07/19/05	HE4MT1A6
	98	(75 - 125)	5.0	(0-20)	SW846 6010B	07/18-07/19/05	HE4MT1A7
		Dilution Factor: 1					
Zinc	NC,MSB	(75 - 125)			SW846 6010B	07/18-07/19/05	HE4MT1A8
	NC,MSB	(75 - 125)		(0-20)	SW846 6010B	07/18-07/19/05	HE4MT1A9
		Dilution Factor: 1					
Mercury	95	(10 - 199)			SW846 7471A	07/18/05	HE4MT1CK
	90	(10 - 199)	4.9	(0-50)	SW846 7471A	07/18/05	HE4MT1CL
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

N Spiked analyte recovery is outside stated control limits.

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A5G080236 Work Order #...: HE4LR-SMP Matrix.....: SO
HE4LR-DUP

Date Sampled...: 07/07/05 Date Received..: 07/08/05

% Moisture.....: 45

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #:	A5G080236-012	
	55.4	51.6	%	7.1	(0-20)	MCAWW 160.3 MOD	07/08-07/11/05	5189400

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A5G080236 Work Order #...: HE4LW-SMP HE4LW-DUP Matrix.....: SO

Date Sampled...: 07/07/05 Date Received..: 07/08/05

% Moisture.....: 11

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #:	A5G080236-013	
	88.7	89.8	%	1.1	(0-20)	MCAWW 160.3 MOD	07/08-07/11/05	5189400

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A5G080236 Work Order #...: HE4NE-SMP HE4NE-DUP Matrix.....: SO

Date Sampled...: 07/07/05 Date Received..: 07/08/05

% Moisture.....: 9.2

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #:	A5G080236-033	
	90.8	91.0	%	0.22	(0-20)	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A5G080236 Work Order #...: HE4NH-SMP HE4NH-DUP Matrix.....: SO

Date Sampled...: 07/07/05 Date Received..: 07/08/05

% Moisture.....: 5.3

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #: A5G080236-035		
	94.7	95.8	%	1.2	(0-20)	MCAWW 160.3 MOD	07/08-07/11/05	5189401

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A5G080236 Work Order #...: HE4DD-SMP Matrix.....: SOLID
HE4DD-DUP

Date Sampled...: 07/07/05 09:12 Date Received..: 07/08/05

% Moisture.....: 18

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #: A5G080219-004		
	82.0	82.1	%	0.079	(0-20)	MCAWW 160.3 MOD	07/08-07/11/05	5192598

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A5G080236 Work Order #...: HE4DG-SMP Matrix.....: SOLID
HE4DG-DUP

Date Sampled...: 07/07/05 09:25 Date Received..: 07/08/05

% Moisture.....: 17

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #: A5G080219-006		
	83.1	83.1	%	0.077	(0-20)	MCAWW 160.3 MOD	07/08-07/11/05	5192598

Dilution Factor: 1

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CONESTOGA-ROVERS & ASSOCIATES
8615 W. Bryn Mawr Avenue
Chicago, Illinois 60631
(773)380-9933 phone
(773)380-6421 fax

CHAIN-OF-CUSTODY RECORD

SHIPPED TO (Laboratory Name): STL N. Canton

REFERENCE NUMBER: 39862

PROJECT NAME: H. Kramer

SAMPLER'S SIGNATURE: John Hargrove PRINTED NAME: John Hargrove

SEQ. No.	DATE	TIME	SAMPLE IDENTIFICATION No.	SAMPLE MATRIX	No. OF CONTAINERS	PARAMETERS: Priority Pol. Metals	REMARKS
	7/7/07		S-070705-JH-001	Soil	1	✓	
			002		1	✓	
			003		1	✓	
			004		1	✓	
			005		1	✓	
			006		1	✓	
			007		1	✓	
			008		1	✓	
			009		1	✓	
			010		1	✓	
			011		1	✓	
			012		1	✓	
			013		1	✓	
			014		1	✓	
			015		1	✓	
			TOTAL NUMBER OF CONTAINERS		15		

RELINQUISHED BY: ① John Hargrove	DATE: TIME:	RECEIVED BY: ②	DATE: TIME:
RELINQUISHED BY: ②	DATE: TIME:	RECEIVED BY: ③	DATE: TIME:
RELINQUISHED BY: ③	DATE: TIME:	RECEIVED BY: ④	DATE: TIME:

METHOD OF SHIPMENT: Fed-X AIR BILL No.

White -Fully Executed Copy
Yellow -Receiving Laboratory Copy
Pink -Shipper Copy
Goldenrod -Sampler Copy

SAMPLE TEAM:

RECEIVED FOR LABORATORY BY: [signature] 13260
DATE: 7/8/05 TIME: 0940

North Canton

HK 01501

152

CONESTOGA-ROVERS & ASSOCIATES
8615 W. Bryn Mawr Avenue
Chicago, Illinois 60631
(773)380-9933 phone
(773)380-6421 fax

SHIPPED TO (Laboratory Name): P2 STL N. Canton

REFERENCE NUMBER: 39826

PROJECT NAME: H. Kramer

CHAIN-OF-CUSTODY RECORD

SAMPLER'S SIGNATURE: John Hargens **PRINTED NAME:** John Hargens

SEQ. No.	DATE	TIME	SAMPLE IDENTIFICATION No.	SAMPLE MATRIX	No. OF CONTAINERS	PARAMETERS: Priority Poll metals	REMARKS
	7/7/05		S-070705-JH-016	soil	1	✓	
			W-070705-JH-017	water	1	✓	
			S-070705-JH-018	soil	1	✓	
			019		1	✓	
			020		1	✓	
			021		1	✓	
			022		1	✓	
			023		1	✓	
			024		1	✓	
			025		1	✓	
			026		1	✓	
			027		1	✓	
			028		1	✓	
			029		1	✓	
			030		1	✓	
			TOTAL NUMBER OF CONTAINERS		15		

RELINQUISHED BY: ① John Hargens	DATE: 7/7/07 TIME: 1800	RECEIVED BY: ②	DATE: TIME:
RELINQUISHED BY: ②	DATE: TIME:	RECEIVED BY: ③	DATE: TIME:
RELINQUISHED BY: ③	DATE: TIME:	RECEIVED BY: ④	DATE: TIME:

METHOD OF SHIPMENT: Fed-X **AIR BILL No.**

White -Fully Executed Copy
Yellow -Receiving Laboratory Copy
Pink -Shipper Copy
Golden -Sampler Copy

SAMPLE TEAM:

RECEIVED FOR LABORATORY BY: 13252
DATE: 7/8/05 TIME: 0940

1001-[illegible]OURCE)GN-CO004

L North Canton

HK 01502

p3

153

CONESTOGA-ROVERS & ASSOCIATES
8615 W. Bryn Mawr Avenue
Chicago, Illinois 60631
(773)380-9933 phone
(773)380-6421 fax

CHAIN-OF-CUSTODY RECORD

SHIPPED TO (Laboratory Name): STL N. Canton

REFERENCE NUMBER: 39026

PROJECT NAME: H Kramer

SAMPLER'S SIGNATURE: John Hargrave PRINTED NAME: John Hargrave

SEQ. No.	DATE	TIME	SAMPLE IDENTIFICATION No.	SAMPLE MATRIX	No. OF CONTAINERS	PARAMETERS: Priority Poll. metals	REMARKS
	7/7/05		S-070705-JH-031	Soil	1	✓	
			032		1	✓	
			033		1	✓	
			034		1	✓	
			035		1	✓	
			036		1	✓	
			037		1	✓	
			038		1	✓	
			W-070705-JH-039	water	1	✓	
			S-070705-JH-040	Soil	1	✓	
			041		1	✓	
			044		1	✓	
			045		1	✓	
			046		1	✓	
			047		1	✓	
			TOTAL NUMBER OF CONTAINERS		15		

RELINQUISHED BY: ① John Hargrave	DATE: TIME: 1800	RECEIVED BY: ②	DATE: TIME:
RELINQUISHED BY: ②	DATE: TIME:	RECEIVED BY: ③	DATE: TIME:
RELINQUISHED BY: ③	DATE: TIME:	RECEIVED BY: ④	DATE: TIME:

METHOD OF SHIPMENT: Fed-X AIR BILL No.

White -Fully Executed Copy
Yellow -Receiving Laboratory Copy
Pink -Shipper Copy
Goldenrod -Sampler Copy

SAMPLE TEAM:

RECEIVED FOR LABORATORY BY: [signature] DATE: 7/8/05 TIME: 0940

13253

North Canton

HK 01503

p 4

154

CONESTOGA-ROVERS & ASSOCIATES
8615 W. Bryn Mawr Avenue
Chicago, Illinois 60631
(773)380-9933 phone
(773)380-6421 fax

SHIPPED TO (Laboratory Name): STL N. Canton

REFERENCE NUMBER: 39826

PROJECT NAME: H Kramer

CHAIN-OF-CUSTODY RECORD

SAMPLER'S SIGNATURE: John Hangen **PRINTED NAME:** John Hangen

SEQ. No.	DATE	TIME	SAMPLE IDENTIFICATION No.	SAMPLE MATRIX	No. OF CONTAINERS	PARAMETERS: priority poll metals	REMARKS
	7/7/05		S-070705-JH-048	soil	1	✓	
			049		1	✓	
			050	✓	1	✓	
			Temp Blank	water	1		

TOTAL NUMBER OF CONTAINERS 4 +15+15+15 = 49

RELINQUISHED BY: ① John Hangen	DATE: 7/7/05 TIME: 1400	RECEIVED BY: ②	DATE: TIME:
RELINQUISHED BY: ②	DATE: TIME:	RECEIVED BY: ③	DATE: TIME:
RELINQUISHED BY: ③	DATE: TIME:	RECEIVED BY: ④	DATE: TIME:

METHOD OF SHIPMENT: Fed-X **AIR BILL No.**

White -Fully Executed Copy
Yellow -Receiving Laboratory Copy
Pink -Shipper Copy
Goldenrod -Sampler Copy

SAMPLE TEAM:

RECEIVED FOR LABORATORY BY: [signature] **DATE:** 7/8/05 **TIME:** 0940

13254

1001 (SOURCE)GN-CO004

L North Canton

HK 01504

STL Cooler Receipt Form/Narrative Lot Number: AQ080236
North Canton Facility

Client: CRA Project: H. KRAMER Quote#:
Cooler Received on: 7/8/05 Opened on: 7/8/05 by: [signature] (Signature)

Fedx [X] Client Drop Off [ ] UPS [ ] DHL [ ] FAS [X] Other: STL Cinci Cooler
STL Cooler No# STL Cinci Foam Box [ ] Client Cooler [ ] Other

1. Were custody seals on the outside of the cooler? Yes [ ] No [X] Intact? Yes [ ] No [ ] NA [X]
   If YES, Quantity
   Were the custody seals signed and dated? Yes [ ] No [ ] NA [X]
2. Shipper's packing slip attached to this form? Yes [X] No [ ] NA [ ]
3. Did custody papers accompany the samples? Yes [X] No [ ] Relinquished by client? Yes [X] No [ ]
4. Did you sign the custody papers in the appropriate place? Yes [X] No [ ]
5. Packing material used: Bubble Wrap [ ] Foam [ ] None [X] Other:
6. Cooler temperature upon receipt 3.8 °C (see back of form for multiple coolers/temp)

METHOD: Temp Vial [X] Coolant & Sample [ ] Against Bottles [ ] IR [X] ICE/H_2O Slurry [ ]
COOLANT: Wet Ice [X] Blue Ice [ ] Dry Ice [ ] Water [ ] None [ ]

7. Did all bottles arrive in good condition (Unbroken)? Yes [X] No [ ]
8. Could all bottle labels and/or tags be reconciled with the COC? Yes [X] No [ ]
9. Were samples at the correct pH? (record below/on back) Yes [X] No [ ] NA [ ]
10. Were correct bottles used for the tests indicated? Yes [X] No [ ]
11. Were air bubbles >6 mm in any VOA vials? Yes [ ] No [ ] NA [X]
12. Sufficient quantity received to perform indicated analyses? Yes [X] No [ ]

Contacted PM AIM Date: 7/8/05 by: [signature] via Voice Mail [X] Verbal [ ] Other [ ]
Concerning: #1 ✓ + Email

√

1. CHAIN OF CUSTODY

The following discrepancies occurred:
Rec'd Samples JH-042 + JH-043 not on coc, will log at end of lot for PP metals and TS.

2. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.

3. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in sample receiving to meet recommended pH level(s). *Nitric Acid Lot # 051105-HNO3; Sulfuric Acid Lot # 102804-H2SO4; Sodium Hydroxide Lot # -041305 -NaOH; Hydrochloric Acid Lot # 100504-HCl; Sodium Hydroxide and Zinc Acetate Lot # 071604-CH3COO2ZN/NaOH*
Sample(s) _____ were received with bubble > 6 mm in diameter (cc: PM)

4. Other (see below or back)

Client ID	pH	Date	Initials
017	<2	7/8/05	[initials]
039	<2	↓	↓

L North Canton

SOP: NC-SC-0005, Sample Receiving 155
N:\QAQC\NARRATIV\STL\Cooler Receipt STL\COOLER_STL_Rev49 062205.doc

HK 01505

STL Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler	Temp	Method	Coolant

Discrepancies Cont.

SEVERN TRENT STL

END OF REPORT

Rec'd CRA
JUL 26 2005

SEVERN TRENT STL

STL North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

Tel: 330 497 9396 Fax: 330 497 0772
www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. 39826

H. KRAMER

Lot #: A5G090184

Julie Czech

Conestoga-Rovers & Associates
8615 W. Bryn Mawr
Chicago, IL 60631

SEVERN TRENT LABORATORIES, INC.

VALIDATED DATA
Project # 039826
Lot Report # A5G090184
Date 07/29/05

Ken Kuzon for
Amy L. McCormick
Project Manager

July 25, 2005

CASE NARRATIVE

A5G090184

The following report contains the analytical results for twenty-six solid samples and two water samples submitted to STL North Canton by Conestoga-Rovers & Associates, Inc. from the H. Kramer Site, project number 39826. The samples were received July 09, 2005, according to documented sample acceptance procedures.

STL utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Julie Czech on July 19, 2005. A summary of QC data for these analyses is included at the back of the report.

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

All solid sample results are reported on an "as received" basis unless otherwise indicated by a dry weight adjustment footnote at the bottom of the analytical report page. The list of parameters which are never reported on a dry weight basis is included on the Sample Summary.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Amy L. McCormick, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT." The total number of pages in this report is 94.

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperature of the cooler upon sample receipt was 2.3°C.

CASE NARRATIVE (continued)

METALS

The sample(s) that contain results between the MDL and the RL were flagged with "B". There is the possibility of false positive of mis-identification at these quantitation levels. The acceptance criteria for the ICB, CCB, and Method Blank are +/- the standard reporting limit (SRL).

Serial dilution of a sample in this lot indicates that physical and chemical interferences were present. Refer to the sample report pages for the affected analytes flagged with "E".

The sample(s) that contained concentrations of target analyte(s) at a reportable level in the associated Method Blank(s) were flagged with "J". Refer to the sample report pages for the affected analyte(s).

Matrix spike recovery and relative percent difference (RPD) data were not calculated for some analytes for S-070805-JH-051 due to the sample concentration reading greater than four times the spike amount. See the Matrix Spike Report for the affected analytes which will be flagged with "NC, MSB".

The matrix spike/matrix spike duplicate(s) for S-070805-JH-051 had recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

The matrix spike/matrix spike duplicate(s) for batch(es) 5199033 had RPD's and recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. STL North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples. These QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. The only exception is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed below.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals
Methylene chloride	Phthalate Esters	Copper
Acetone		Iron
2-Butanone		Zinc
		Lead*

- *for analyses run on TJA Trace ICP, ICPMS or GFAA only*

QUALITY CONTROL ELEMENTS OF SW-846 METHODS
(Continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepped and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepped and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide, PCB, and PAH methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria.

ACCREDITED IN ACCORDANCE WITH nelac

STL North Canton Certifications and Approvals:

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225), Illinois (#200004), Kansas (#E10336), Massachusetts (#M-OH048), Maryland (#272), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), North Carolina (#39702), Ohio (#6090), OhioVAP (#CL0024), Rhode Island (#237), South Carolina (#92007001, #92007002, #92007003), Tennessee (#02903), Utah (#QUAN9), Virginia (#00011), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit, ACIL Seal of Excellence – Participating Lab Status Award (#82)

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EXECUTIVE SUMMARY - Detection Highlights

A5G090184

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070805-JH-051 07/08/05 001				
Mercury	0.32	0.11	mg/kg	SW846 7471A
Arsenic	3.9	1.1	mg/kg	SW846 6010B
Lead	209 J	0.32	mg/kg	SW846 6010B
Thallium	0.59 B	1.1	mg/kg	SW846 6010B
Antimony	1.4 B	6.5	mg/kg	SW846 6010B
Beryllium	0.44 B,J	0.54	mg/kg	SW846 6010B
Cadmium	1.8	0.54	mg/kg	SW846 6010B
Chromium	5.3	1.1	mg/kg	SW846 6010B
Copper	269 J	2.7	mg/kg	SW846 6010B
Nickel	9.4	4.3	mg/kg	SW846 6010B
Silver	0.32 B	1.1	mg/kg	SW846 6010B
Zinc	692	2.2	mg/kg	SW846 6010B
Percent Solids	92.8	10.0	%	MCAWW 160.3 MOD
S-070805-JH-052 07/08/05 002				
Mercury	0.13	0.10	mg/kg	SW846 7471A
Arsenic	5.2	1.0	mg/kg	SW846 6010B
Lead	132 J	0.31	mg/kg	SW846 6010B
Antimony	0.97 B	6.2	mg/kg	SW846 6010B
Beryllium	2.1 J	0.51	mg/kg	SW846 6010B
Cadmium	2.7	0.51	mg/kg	SW846 6010B
Chromium	14.6	1.0	mg/kg	SW846 6010B
Copper	141 J	2.6	mg/kg	SW846 6010B
Nickel	20.9	4.1	mg/kg	SW846 6010B
Zinc	559	2.1	mg/kg	SW846 6010B
Percent Solids	97.4	10.0	%	MCAWW 160.3 MOD
S-070805-JH-053 07/08/05 003				
Mercury	0.14	0.10	mg/kg	SW846 7471A
Arsenic	5.7	1.0	mg/kg	SW846 6010B
Lead	135 J	0.31	mg/kg	SW846 6010B
Antimony	1.0 B	6.2	mg/kg	SW846 6010B
Beryllium	2.0 J	0.51	mg/kg	SW846 6010B
Cadmium	2.4	0.51	mg/kg	SW846 6010B
Chromium	13.7	1.0	mg/kg	SW846 6010B
Copper	140 J	2.6	mg/kg	SW846 6010B
Nickel	17.0	4.1	mg/kg	SW846 6010B
Zinc	536	2.1	mg/kg	SW846 6010B
Percent Solids	97.1	10.0	%	MCAWW 160.3 MOD

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EXECUTIVE SUMMARY - Detection Highlights

A5G090184

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070805-JH-054 07/08/05 004				
Mercury	0.23	0.11	mg/kg	SW846 7471A
Arsenic	4.8	1.1	mg/kg	SW846 6010B
Lead	143 J	0.33	mg/kg	SW846 6010B
Thallium	0.63 B	1.1	mg/kg	SW846 6010B
Beryllium	0.59 J	0.56	mg/kg	SW846 6010B
Cadmium	1.6	0.56	mg/kg	SW846 6010B
Chromium	27.5	1.1	mg/kg	SW846 6010B
Copper	95.7 J	2.8	mg/kg	SW846 6010B
Nickel	26.1	4.5	mg/kg	SW846 6010B
Zinc	300	2.2	mg/kg	SW846 6010B
Percent Solids	89.6	10.0	%	MCAWW 160.3 MOD
S-070805-JH-055 07/08/05 005				
Mercury	0.11 B	0.12	mg/kg	SW846 7471A
Arsenic	4.9	1.2	mg/kg	SW846 6010B
Lead	84.8 J	0.35	mg/kg	SW846 6010B
Beryllium	0.65 J	0.59	mg/kg	SW846 6010B
Cadmium	1.4	0.59	mg/kg	SW846 6010B
Chromium	22.4	1.2	mg/kg	SW846 6010B
Copper	89.3 J	2.9	mg/kg	SW846 6010B
Nickel	18.5	4.7	mg/kg	SW846 6010B
Zinc	294	2.3	mg/kg	SW846 6010B
Percent Solids	85.5	10.0	%	MCAWW 160.3 MOD
S-070805-JH-056 07/08/05 006				
Mercury	0.45	0.10	mg/kg	SW846 7471A
Arsenic	6.6	1.0	mg/kg	SW846 6010B
Lead	1040 J	0.31	mg/kg	SW846 6010B
Antimony	0.56 B	6.2	mg/kg	SW846 6010B
Beryllium	0.83 J	0.52	mg/kg	SW846 6010B
Cadmium	2.4	0.52	mg/kg	SW846 6010B
Chromium	24.8	1.0	mg/kg	SW846 6010B
Copper	95.1 J	2.6	mg/kg	SW846 6010B
Nickel	18.9	4.2	mg/kg	SW846 6010B
Zinc	1990	10.4	mg/kg	SW846 6010B
Percent Solids	96.3	10.0	%	MCAWW 160.3 MOD

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EXECUTIVE SUMMARY - Detection Highlights

A5G090184

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070805-JH-057 07/08/05 007				
Mercury	1.7	0.10	mg/kg	SW846 7471A
Arsenic	19.3	1.0	mg/kg	SW846 6010B
Lead	3640 J	6.2	mg/kg	SW846 6010B
Selenium	1.5	0.52	mg/kg	SW846 6010B
Antimony	2.1 B	6.2	mg/kg	SW846 6010B
Beryllium	1.1 J	0.52	mg/kg	SW846 6010B
Cadmium	8.9	0.52	mg/kg	SW846 6010B
Chromium	57.7	1.0	mg/kg	SW846 6010B
Copper	168 J	2.6	mg/kg	SW846 6010B
Nickel	25.1	4.1	mg/kg	SW846 6010B
Silver	0.94 B	1.0	mg/kg	SW846 6010B
Zinc	2660	41.5	mg/kg	SW846 6010B
Percent Solids	96.4	10.0	%	MCAWW 160.3 MOD
W-070805-JH-058 07/08/05 008				
Thallium	0.0067 B	0.010	mg/L	SW846 6010B
S-070805-JH-059 07/08/05 009				
Mercury	0.16	0.11	mg/kg	SW846 7471A
Arsenic	8.5	1.1	mg/kg	SW846 6010B
Lead	149 J	0.33	mg/kg	SW846 6010B
Antimony	0.62 B	6.5	mg/kg	SW846 6010B
Beryllium	0.86 J	0.54	mg/kg	SW846 6010B
Cadmium	1.2	0.54	mg/kg	SW846 6010B
Chromium	24.2	1.1	mg/kg	SW846 6010B
Copper	49.6 J	2.7	mg/kg	SW846 6010B
Nickel	24.1	4.3	mg/kg	SW846 6010B
Zinc	199	2.2	mg/kg	SW846 6010B
Percent Solids	92.0	10.0	%	MCAWW 160.3 MOD
S-070805-JH-060 07/08/05 010				
Mercury	0.48	0.11	mg/kg	SW846 7471A
Arsenic	11.1	1.1	mg/kg	SW846 6010B
Lead	391 J	0.33	mg/kg	SW846 6010B
Antimony	0.65 B	6.5	mg/kg	SW846 6010B
Beryllium	1.8 J	0.54	mg/kg	SW846 6010B
Cadmium	1.8	0.54	mg/kg	SW846 6010B
Chromium	14.2	1.1	mg/kg	SW846 6010B
Copper	96.5 J	2.7	mg/kg	SW846 6010B
Nickel	25.0	4.4	mg/kg	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

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PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070805-JH-060 07/08/05 010				
Zinc	356	2.2	mg/kg	SW846 6010B
Percent Solids	91.9	10.0	%	MCAWW 160.3 MOD
S-070805-JH-061 07/08/05 011				
Mercury	0.12	0.11	mg/kg	SW846 7471A
Arsenic	11.0	1.1	mg/kg	SW846 6010B
Lead	89.2 J	0.33	mg/kg	SW846 6010B
Thallium	0.70 B	1.1	mg/kg	SW846 6010B
Antimony	0.56 B	6.6	mg/kg	SW846 6010B
Beryllium	0.80 J	0.55	mg/kg	SW846 6010B
Cadmium	1.4	0.55	mg/kg	SW846 6010B
Chromium	22.5	1.1	mg/kg	SW846 6010B
Copper	53.6 J	2.7	mg/kg	SW846 6010B
Nickel	22.5	4.4	mg/kg	SW846 6010B
Zinc	193	2.2	mg/kg	SW846 6010B
Percent Solids	91.0	10.0	%	MCAWW 160.3 MOD
S-070805-JH-062 07/08/05 012				
Mercury	0.35	0.10	mg/kg	SW846 7471A
Arsenic	3.7	1.0	mg/kg	SW846 6010B
Lead	137 J	0.31	mg/kg	SW846 6010B
Antimony	0.51 B	6.1	mg/kg	SW846 6010B
Beryllium	0.39 B,J	0.51	mg/kg	SW846 6010B
Cadmium	0.82	0.51	mg/kg	SW846 6010B
Chromium	9.3	1.0	mg/kg	SW846 6010B
Copper	69.5 J	2.6	mg/kg	SW846 6010B
Nickel	10.2	4.1	mg/kg	SW846 6010B
Zinc	169	2.0	mg/kg	SW846 6010B
Percent Solids	97.7	10.0	%	MCAWW 160.3 MOD
S-070805-JH-063 07/08/05 013				
Mercury	0.029 B	0.10	mg/kg	SW846 7471A
Arsenic	1.7	1.0	mg/kg	SW846 6010B
Lead	23.8 J	0.30	mg/kg	SW846 6010B
Beryllium	0.26 B,J	0.50	mg/kg	SW846 6010B
Cadmium	0.32 B	0.50	mg/kg	SW846 6010B
Chromium	4.3	1.0	mg/kg	SW846 6010B
Copper	14.2 J	2.5	mg/kg	SW846 6010B
Nickel	4.4	4.0	mg/kg	SW846 6010B
Zinc	45.8	2.0	mg/kg	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

A5G090184

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070805-JH-063 07/08/05 013				
Percent Solids	99.2	10.0	%	MCAWW 160.3 MOD
S-070805-JH-064 07/08/05 014				
Mercury	0.66	0.11	mg/kg	SW846 7471A
Arsenic	11.4	1.1	mg/kg	SW846 6010B
Lead	702 J	0.33	mg/kg	SW846 6010B
Antimony	1.4 B	6.6	mg/kg	SW846 6010B
Beryllium	1.1 J	0.55	mg/kg	SW846 6010B
Cadmium	8.4	0.55	mg/kg	SW846 6010B
Chromium	26.1	1.1	mg/kg	SW846 6010B
Copper	112 J	2.7	mg/kg	SW846 6010B
Nickel	19.9	4.4	mg/kg	SW846 6010B
Silver	0.38 B	1.1	mg/kg	SW846 6010B
Zinc	615	2.2	mg/kg	SW846 6010B
Percent Solids	91.3	10.0	%	MCAWW 160.3 MOD
S-070805-JH-065 07/08/05 015				
Mercury	0.19	0.11	mg/kg	SW846 7471A
Arsenic	5.1	1.1	mg/kg	SW846 6010B
Lead	564 J	0.33	mg/kg	SW846 6010B
Antimony	0.90 B	6.6	mg/kg	SW846 6010B
Beryllium	0.49 B,J	0.55	mg/kg	SW846 6010B
Cadmium	1.5	0.55	mg/kg	SW846 6010B
Chromium	22.2	1.1	mg/kg	SW846 6010B
Copper	65.9 J	2.8	mg/kg	SW846 6010B
Nickel	15.7	4.4	mg/kg	SW846 6010B
Zinc	418	2.2	mg/kg	SW846 6010B
Percent Solids	90.9	10.0	%	MCAWW 160.3 MOD
S-070805-JH-066 07/08/05 016				
Mercury	0.28	0.10	mg/kg	SW846 7471A
Arsenic	3.7	1.0	mg/kg	SW846 6010B
Lead	479 J	0.30	mg/kg	SW846 6010B
Antimony	0.80 B	6.1	mg/kg	SW846 6010B
Beryllium	0.50 B,J	0.51	mg/kg	SW846 6010B
Cadmium	2.5	0.51	mg/kg	SW846 6010B
Chromium	39.6	1.0	mg/kg	SW846 6010B
Copper	210 J	2.5	mg/kg	SW846 6010B
Nickel	24.8	4.1	mg/kg	SW846 6010B
Silver	1.8	1.0	mg/kg	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

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PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070805-JH-066 07/08/05 016				
Zinc	535	2.0	mg/kg	SW846 6010B
Percent Solids	98.6	10.0	%	MCAWW 160.3 MOD
S-070805-JH-067 07/08/05 017				
Mercury	1.2	0.10	mg/kg	SW846 7471A
Arsenic	30.7	1.0	mg/kg	SW846 6010B
Lead	288 J	0.30	mg/kg	SW846 6010B
Thallium	0.54 B	1.0	mg/kg	SW846 6010B
Antimony	1.0 B	6.1	mg/kg	SW846 6010B
Beryllium	1.7 J	0.51	mg/kg	SW846 6010B
Cadmium	2.7	0.51	mg/kg	SW846 6010B
Chromium	33.0	1.0	mg/kg	SW846 6010B
Copper	133 J	2.5	mg/kg	SW846 6010B
Nickel	18.7	4.1	mg/kg	SW846 6010B
Zinc	488	2.0	mg/kg	SW846 6010B
Percent Solids	98.6	10.0	%	MCAWW 160.3 MOD
S-070805-JH-068 07/08/05 018				
Mercury	0.81	0.10	mg/kg	SW846 7471A
Arsenic	19.3	1.0	mg/kg	SW846 6010B
Lead	247 J	0.30	mg/kg	SW846 6010B
Antimony	1.7 B	6.1	mg/kg	SW846 6010B
Beryllium	0.75 J	0.51	mg/kg	SW846 6010B
Cadmium	2.8	0.51	mg/kg	SW846 6010B
Chromium	28.7	1.0	mg/kg	SW846 6010B
Copper	120 J	2.5	mg/kg	SW846 6010B
Nickel	13.6	4.1	mg/kg	SW846 6010B
Silver	0.32 B	1.0	mg/kg	SW846 6010B
Zinc	415	2.0	mg/kg	SW846 6010B
Percent Solids	98.6	10.0	%	MCAWW 160.3 MOD
W-070805-JH-069 07/08/05 019				
Thallium	0.0065 B	0.010	mg/L	SW846 6010B
Nickel	0.0018 B	0.040	mg/L	SW846 6010B
S-070805-JH-070 07/08/05 020				
Mercury	0.17	0.11	mg/kg	SW846 7471A
Arsenic	3.9	1.1	mg/kg	SW846 6010B
Lead	304 J	0.33	mg/kg	SW846 6010B

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EXECUTIVE SUMMARY - Detection Highlights

A5G090184

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070805-JH-070 07/08/05 020				
Antimony	0.62 B	6.6	mg/kg	SW846 6010B
Beryllium	0.57 J	0.55	mg/kg	SW846 6010B
Cadmium	5.8	0.55	mg/kg	SW846 6010B
Chromium	14.6	1.1	mg/kg	SW846 6010B
Copper	362 J	2.8	mg/kg	SW846 6010B
Nickel	16.3	4.4	mg/kg	SW846 6010B
Silver	0.46 B	1.1	mg/kg	SW846 6010B
Zinc	1230	11.0	mg/kg	SW846 6010B
Percent Solids	90.9	10.0	%	MCAWW 160.3 MOD
S-070805-JH-071 07/08/05 021				
Mercury	0.089 B	0.10	mg/kg	SW846 7471A
Arsenic	14.9	1.0	mg/kg	SW846 6010B
Lead	132 J	0.31	mg/kg	SW846 6010B
Thallium	0.67 B	1.0	mg/kg	SW846 6010B
Antimony	1.7 B	6.2	mg/kg	SW846 6010B
Beryllium	2.5 J	0.52	mg/kg	SW846 6010B
Cadmium	4.0	0.52	mg/kg	SW846 6010B
Chromium	17.3	1.0	mg/kg	SW846 6010B
Copper	122 J	2.6	mg/kg	SW846 6010B
Nickel	28.0	4.2	mg/kg	SW846 6010B
Zinc	418	2.1	mg/kg	SW846 6010B
Percent Solids	96.3	10.0	%	MCAWW 160.3 MOD
S-070805-JH-072 07/08/05 022				
Mercury	0.45	0.10	mg/kg	SW846 7471A
Arsenic	45.5	1.0	mg/kg	SW846 6010B
Lead	350 J	0.31	mg/kg	SW846 6010B
Antimony	1.2 B	6.2	mg/kg	SW846 6010B
Beryllium	1.0 J,E	0.52	mg/kg	SW846 6010B
Cadmium	3.1	0.52	mg/kg	SW846 6010B
Chromium	20.9	1.0	mg/kg	SW846 6010B
Copper	280 J	2.6	mg/kg	SW846 6010B
Nickel	22.8	4.1	mg/kg	SW846 6010B
Silver	0.33 B	1.0	mg/kg	SW846 6010B
Zinc	1290	10.4	mg/kg	SW846 6010B
Percent Solids	96.4	10.0	%	MCAWW 160.3 MOD

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EXECUTIVE SUMMARY - Detection Highlights

A5G090184

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070805-JH-073 07/08/05 023				
Mercury	0.40	0.11	mg/kg	SW846 7471A
Arsenic	7.2	1.1	mg/kg	SW846 6010B
Lead	594	0.32	mg/kg	SW846 6010B
Antimony	1.0 B	6.3	mg/kg	SW846 6010B
Beryllium	0.68 J	0.53	mg/kg	SW846 6010B
Cadmium	4.1	0.53	mg/kg	SW846 6010B
Chromium	26.9	1.1	mg/kg	SW846 6010B
Copper	119	2.6	mg/kg	SW846 6010B
Nickel	18.2	4.2	mg/kg	SW846 6010B
Zinc	566	2.1	mg/kg	SW846 6010B
Percent Solids	95.2	10.0	%	MCAWW 160.3 MOD
S-070805-JH-074 07/08/05 024				
Mercury	0.065 B	0.10	mg/kg	SW846 7471A
Arsenic	12.8	1.0	mg/kg	SW846 6010B
Lead	59.7	0.31	mg/kg	SW846 6010B
Thallium	0.60 B	1.0	mg/kg	SW846 6010B
Antimony	0.55 B	6.3	mg/kg	SW846 6010B
Beryllium	0.73 J	0.52	mg/kg	SW846 6010B
Cadmium	0.65	0.52	mg/kg	SW846 6010B
Chromium	14.8	1.0	mg/kg	SW846 6010B
Copper	47.6	2.6	mg/kg	SW846 6010B
Nickel	20.0	4.2	mg/kg	SW846 6010B
Zinc	147	2.1	mg/kg	SW846 6010B
Percent Solids	95.7	10.0	%	MCAWW 160.3 MOD
S-070805-JH-075 07/08/05 025				
Mercury	0.66	0.11	mg/kg	SW846 7471A
Arsenic	6.1	1.1	mg/kg	SW846 6010B
Lead	265	0.32	mg/kg	SW846 6010B
Beryllium	0.67 J	0.53	mg/kg	SW846 6010B
Cadmium	0.88	0.53	mg/kg	SW846 6010B
Chromium	18.5	1.1	mg/kg	SW846 6010B
Copper	41.0	2.7	mg/kg	SW846 6010B
Nickel	15.4	4.3	mg/kg	SW846 6010B
Zinc	267	2.1	mg/kg	SW846 6010B
Percent Solids	94.0	10.0	%	MCAWW 160.3 MOD

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A5G090184

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-070805-JH-076 07/08/05 026				
Mercury	0.48	0.10	mg/kg	SW846 7471A
Arsenic	5.5	1.0	mg/kg	SW846 6010B
Lead	550	0.31	mg/kg	SW846 6010B
Antimony	0.77 B	6.2	mg/kg	SW846 6010B
Beryllium	0.50 B,J	0.51	mg/kg	SW846 6010B
Cadmium	4.2	0.51	mg/kg	SW846 6010B
Chromium	27.7	1.0	mg/kg	SW846 6010B
Copper	86.9	2.6	mg/kg	SW846 6010B
Nickel	19.6	4.1	mg/kg	SW846 6010B
Zinc	564	2.1	mg/kg	SW846 6010B
Percent Solids	97.2	10.0	%	MCAWW 160.3 MOD
S-070805-JH-077 07/08/05 027				
Arsenic	8.1	1.2	mg/kg	SW846 6010B
Lead	193	0.35	mg/kg	SW846 6010B
Beryllium	0.61 J	0.58	mg/kg	SW846 6010B
Cadmium	2.8	0.58	mg/kg	SW846 6010B
Chromium	21.6	1.2	mg/kg	SW846 6010B
Copper	45.8	2.9	mg/kg	SW846 6010B
Nickel	21.8	4.7	mg/kg	SW846 6010B
Zinc	752	2.3	mg/kg	SW846 6010B
Percent Solids	85.6	10.0	%	MCAWW 160.3 MOD
S-070805-JH-078 07/08/05 028				
Mercury	0.96	0.10	mg/kg	SW846 7471A
Arsenic	9.5	1.0	mg/kg	SW846 6010B
Lead	716	0.31	mg/kg	SW846 6010B
Antimony	2.4 B	6.2	mg/kg	SW846 6010B
Beryllium	0.73 J	0.52	mg/kg	SW846 6010B
Cadmium	3.3	0.52	mg/kg	SW846 6010B
Chromium	23.6	1.0	mg/kg	SW846 6010B
Copper	280	2.6	mg/kg	SW846 6010B
Nickel	24.0	4.2	mg/kg	SW846 6010B
Silver	0.46 B	1.0	mg/kg	SW846 6010B
Zinc	844	2.1	mg/kg	SW846 6010B
Percent Solids	96.2	10.0	%	MCAWW 160.3 MOD

ANALYTICAL METHODS SUMMARY

A5G090184

PARAMETER	ANALYTICAL METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B
Mercury in Liquid Waste (Manual Cold-Vapor)	SW846 7470A
Mercury in Solid Waste (Manual Cold-Vapor)	SW846 7471A
Total Residue as Percent Solids	MCAWW 160.3 MOD
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A5G090184

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
HE6W9	001	S-070805-JH-051	07/08/05	
HE6XD	002	S-070805-JH-052	07/08/05	
HE6XE	003	S-070805-JH-053	07/08/05	
HE6XF	004	S-070805-JH-054	07/08/05	
HE6XG	005	S-070805-JH-055	07/08/05	
HE6XH	006	S-070805-JH-056	07/08/05	
HE6XJ	007	S-070805-JH-057	07/08/05	
HE6XK	008	W-070805-JH-058	07/08/05	
HE6XL	009	S-070805-JH-059	07/08/05	
HE6XN	010	S-070805-JH-060	07/08/05	
HE6XP	011	S-070805-JH-061	07/08/05	
HE6XQ	012	S-070805-JH-062	07/08/05	
HE6XR	013	S-070805-JH-063	07/08/05	
HE6XT	014	S-070805-JH-064	07/08/05	
HE6XW	015	S-070805-JH-065	07/08/05	
HE6XX	016	S-070805-JH-066	07/08/05	
HE6X1	017	S-070805-JH-067	07/08/05	
HE6X6	018	S-070805-JH-068	07/08/05	
HE6X7	019	W-070805-JH-069	07/08/05	
HE6X8	020	S-070805-JH-070	07/08/05	
HE6X9	021	S-070805-JH-071	07/08/05	
HE60A	022	S-070805-JH-072	07/08/05	
HE60C	023	S-070805-JH-073	07/08/05	
HE60D	024	S-070805-JH-074	07/08/05	
HE60E	025	S-070805-JH-075	07/08/05	
HE60F	026	S-070805-JH-076	07/08/05	
HE60G	027	S-070805-JH-077	07/08/05	
HE60H	028	S-070805-JH-078	07/08/05	

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-051

TOTAL Metals

Lot-Sample #...: A5G090184-001 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 7.2

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199038						
Arsenic	3.9	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6W91AL
		Dilution Factor: 1				
Antimony	1.4 B	6.5	mg/kg	SW846 6010B	07/18-07/19/05	HE6W91AC
		Dilution Factor: 1				
Beryllium	0.44 B,J	0.54	mg/kg	SW846 6010B	07/18-07/19/05	HE6W91AD
		Dilution Factor: 1				
Lead	209 J	0.32	mg/kg	SW846 6010B	07/18-07/19/05	HE6W91AM
		Dilution Factor: 1				
Cadmium	1.8	0.54	mg/kg	SW846 6010B	07/18-07/19/05	HE6W91AE
		Dilution Factor: 1				
lenium	ND	0.54	mg/kg	SW846 6010B	07/18-07/19/05	HE6W91AN
		Dilution Factor: 1				
Chromium	5.3	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6W91AF
		Dilution Factor: 1				
Thallium	0.59 B	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6W91AP
		Dilution Factor: 1				
Copper	269 J	2.7	mg/kg	SW846 6010B	07/18-07/19/05	HE6W91AG
		Dilution Factor: 1				
Nickel	9.4	4.3	mg/kg	SW846 6010B	07/18-07/19/05	HE6W91AH
		Dilution Factor: 1				
Silver	0.32 B	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6W91AJ
		Dilution Factor: 1				
Zinc	692	2.2	mg/kg	SW846 6010B	07/18-07/19/05	HE6W91AK
		Dilution Factor: 1				
Mercury	0.32	0.11	mg/kg	SW846 7471A	07/18/05	HE6W91AQ
		Dilution Factor: 1				

NOTE(S):

its and reporting limits have been adjusted for dry weight.

stimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-051

General Chemistry

Lot-Sample #...: A5G090184-001 Work Order #...: HE6W9 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 7.2

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	92.8	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-052

TOTAL Metals

Lot-Sample #...: A5G090184-002
Date Sampled...: 07/08/05
% Moisture.....: 2.6

Date Received..: 07/09/05

Matrix.....: SO

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199038						
Arsenic	5.2	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XD1AL
		Dilution Factor: 1				
Antimony	0.97 B	6.2	mg/kg	SW846 6010B	07/18-07/19/05	HE6XD1AC
		Dilution Factor: 1				
Beryllium	2.1 J	0.51	mg/kg	SW846 6010B	07/18-07/19/05	HE6XD1AD
		Dilution Factor: 1				
Lead	132 J	0.31	mg/kg	SW846 6010B	07/18-07/19/05	HE6XD1AM
		Dilution Factor: 1				
Cadmium	2.7	0.51	mg/kg	SW846 6010B	07/18-07/19/05	HE6XD1AE
		Dilution Factor: 1				
elenium	ND	0.51	mg/kg	SW846 6010B	07/18-07/19/05	HE6XD1AN
		Dilution Factor: 1				
Chromium	14.6	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XD1AF
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XD1AP
		Dilution Factor: 1				
Copper	141 J	2.6	mg/kg	SW846 6010B	07/18-07/19/05	HE6XD1AG
		Dilution Factor: 1				
Nickel	20.9	4.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XD1AH
		Dilution Factor: 1				
Silver	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XD1AJ
		Dilution Factor: 1				
Zinc	559	2.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XD1AK
		Dilution Factor: 1				
Mercury	0.13	0.10	mg/kg	SW846 7471A	07/18/05	HE6XD1AQ
		Dilution Factor: 1				

NOTE(S):

uits and reporting limits have been adjusted for dry weight.

Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

STL North Canton

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-052

General Chemistry

Lot-Sample #...: A5G090184-002 Work Order #...: HE6XD Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 2.6

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	97.4	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JB-053

TOTAL Metals

Lot-Sample #...: A5G090184-003 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 2.9

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199038						
Arsenic	5.7	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XE1AL
		Dilution Factor: 1				
Antimony	1.0 B	6.2	mg/kg	SW846 6010B	07/18-07/19/05	HE6XE1AC
		Dilution Factor: 1				
Beryllium	2.0 J	0.51	mg/kg	SW846 6010B	07/18-07/19/05	HE6XE1AD
		Dilution Factor: 1				
Lead	135 J	0.31	mg/kg	SW846 6010B	07/18-07/19/05	HE6XE1AM
		Dilution Factor: 1				
Cadmium	2.4	0.51	mg/kg	SW846 6010B	07/18-07/19/05	HE6XE1AE
		Dilution Factor: 1				
elenium	ND	0.51	mg/kg	SW846 6010B	07/18-07/19/05	HE6XE1AN
		Dilution Factor: 1				
Chromium	13.7	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XE1AF
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XE1AP
		Dilution Factor: 1				
Copper	140 J	2.6	mg/kg	SW846 6010B	07/18-07/19/05	HE6XE1AG
		Dilution Factor: 1				
Nickel	17.0	4.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XE1AH
		Dilution Factor: 1				
Silver	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XE1AJ
		Dilution Factor: 1				
Zinc	536	2.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XE1AK
		Dilution Factor: 1				
Mercury	0.14	0.10	mg/kg	SW846 7471A	07/18/05	HE6XE1AQ
		Dilution Factor: 1				

NOTE(S):

ults and reporting limits have been adjusted for dry weight.

Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-053

General Chemistry

Lot-Sample #...: A5G090184-003 Work Order #...: HE6XE Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 2.9

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	97.1	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-054

TOTAL Metals

Lot-Sample #...: A5G090184-004 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 10

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199038						
Arsenic	4.8	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XF1AL
		Dilution Factor: 1				
Antimony	ND	6.7	mg/kg	SW846 6010B	07/18-07/19/05	HE6XF1AC
		Dilution Factor: 1				
Beryllium	0.59 J	0.56	mg/kg	SW846 6010B	07/18-07/19/05	HE6XF1AD
		Dilution Factor: 1				
Lead	143 J	0.33	mg/kg	SW846 6010B	07/18-07/19/05	HE6XF1AM
		Dilution Factor: 1				
Cadmium	1.6	0.56	mg/kg	SW846 6010B	07/18-07/19/05	HE6XF1AE
		Dilution Factor: 1				
elenium	ND	0.56	mg/kg	SW846 6010B	07/18-07/19/05	HE6XF1AN
		Dilution Factor: 1				
Chromium	27.5	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XF1AF
		Dilution Factor: 1				
Thallium	0.63 B	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XF1AP
		Dilution Factor: 1				
Copper	95.7 J	2.8	mg/kg	SW846 6010B	07/18-07/19/05	HE6XF1AG
		Dilution Factor: 1				
Nickel	26.1	4.5	mg/kg	SW846 6010B	07/18-07/19/05	HE6XF1AH
		Dilution Factor: 1				
Silver	ND	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XF1AJ
		Dilution Factor: 1				
Zinc	300	2.2	mg/kg	SW846 6010B	07/18-07/19/05	HE6XF1AK
		Dilution Factor: 1				
Mercury	0.23	0.11	mg/kg	SW846 7471A	07/18/05	HE6XF1AQ
		Dilution Factor: 1				

NOTE(S):

ults and reporting limits have been adjusted for dry weight.

Method blank contamination. The associated method blank contains the target analyte at a reportable level.

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-054

General Chemistry

Lot-Sample #...: A5G090184-004 Work Order #...: HE6XF Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 10

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	89.6	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-055

TOTAL Metals

Lot-Sample #...: A5G090184-005 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 15

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199038						
Arsenic	4.9	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE6XG1AL
		Dilution Factor: 1				
Antimony	ND	7.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XG1AC
		Dilution Factor: 1				
Beryllium	0.65 J	0.59	mg/kg	SW846 6010B	07/18-07/19/05	HE6XG1AD
		Dilution Factor: 1				
Lead	84.8 J	0.35	mg/kg	SW846 6010B	07/18-07/19/05	HE6XG1AM
		Dilution Factor: 1				
Cadmium	1.4	0.59	mg/kg	SW846 6010B	07/18-07/19/05	HE6XG1AE
		Dilution Factor: 1				
lenium	ND	0.59	mg/kg	SW846 6010B	07/18-07/19/05	HE6XG1AN
		Dilution Factor: 1				
Chromium	22.4	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE6XG1AF
		Dilution Factor: 1				
Thallium	ND	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE6XG1AP
		Dilution Factor: 1				
Copper	89.3 J	2.9	mg/kg	SW846 6010B	07/18-07/19/05	HE6XG1AG
		Dilution Factor: 1				
Nickel	18.5	4.7	mg/kg	SW846 6010B	07/18-07/19/05	HE6XG1AH
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	07/18-07/19/05	HE6XG1AJ
		Dilution Factor: 1				
Zinc	294	2.3	mg/kg	SW846 6010B	07/18-07/19/05	HE6XG1AK
		Dilution Factor: 1				
Mercury	0.11 B	0.12	mg/kg	SW846 7471A	07/18/05	HE6XG1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-055

General Chemistry

Lot-Sample #...: A5G090184-005 Work Order #...: HE6XG Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 15

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	85.5	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-056

TOTAL Metals

Lot-Sample #...: A5G090184-006 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 3.7

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199038						
Arsenic	6.6	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XH1AL
		Dilution Factor: 1				
Antimony	0.56 B	6.2	mg/kg	SW846 6010B	07/18-07/19/05	HE6XH1AC
		Dilution Factor: 1				
Beryllium	0.83 J	0.52	mg/kg	SW846 6010B	07/18-07/19/05	HE6XH1AD
		Dilution Factor: 1				
Lead	1040 J	0.31	mg/kg	SW846 6010B	07/18-07/19/05	HE6XH1AM
		Dilution Factor: 1				
Cadmium	2.4	0.52	mg/kg	SW846 6010B	07/18-07/19/05	HE6XH1AE
		Dilution Factor: 1				
lenium	ND	0.52	mg/kg	SW846 6010B	07/18-07/19/05	HE6XH1AN
		Dilution Factor: 1				
Chromium	24.8	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XH1AF
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XH1AP
		Dilution Factor: 1				
Copper	95.1 J	2.6	mg/kg	SW846 6010B	07/18-07/19/05	HE6XH1AG
		Dilution Factor: 1				
Nickel	18.9	4.2	mg/kg	SW846 6010B	07/18-07/19/05	HE6XH1AH
		Dilution Factor: 1				
Silver	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XH1AJ
		Dilution Factor: 1				
Zinc	1990	10.4	mg/kg	SW846 6010B	07/18-07/19/05	HE6XH1AK
		Dilution Factor: 5				
Mercury	0.45	0.10	mg/kg	SW846 7471A	07/18/05	HE6XH1AQ
		Dilution Factor: 1				

NOTE(S):

ults and reporting limits have been adjusted for dry weight.

Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-056

General Chemistry

Lot-Sample #...: A5G090184-006 Work Order #...: HE6XH Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 3.7

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	96.3	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-057

TOTAL Metals

Lot-Sample #...: A5G090184-007 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 3.6

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199038						
Arsenic	19.3	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XJ1AL
		Dilution Factor: 1				
Antimony	2.1 B	6.2	mg/kg	SW846 6010B	07/18-07/19/05	HE6XJ1AC
		Dilution Factor: 1				
Beryllium	1.1 J	0.52	mg/kg	SW846 6010B	07/18-07/19/05	HE6XJ1AD
		Dilution Factor: 1				
Lead	3640 J	6.2	mg/kg	SW846 6010B	07/18-07/19/05	HE6XJ1AM
		Dilution Factor: 20				
Cadmium	8.9	0.52	mg/kg	SW846 6010B	07/18-07/19/05	HE6XJ1AE
		Dilution Factor: 1				
elenium	1.5	0.52	mg/kg	SW846 6010B	07/18-07/19/05	HE6XJ1AN
		Dilution Factor: 1				
Chromium	57.7	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XJ1AF
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XJ1AP
		Dilution Factor: 1				
Copper	168 J	2.6	mg/kg	SW846 6010B	07/18-07/19/05	HE6XJ1AG
		Dilution Factor: 1				
Nickel	25.1	4.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XJ1AH
		Dilution Factor: 1				
Silver	0.94 B	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XJ1AJ
		Dilution Factor: 1				
Zinc	2660	41.5	mg/kg	SW846 6010B	07/18-07/19/05	HE6XJ1AK
		Dilution Factor: 20				
Mercury	1.7	0.10	mg/kg	SW846 7471A	07/18/05	HE6XJ1AQ
		Dilution Factor: 1				

NOTE(S):

ults and reporting limits have been adjusted for dry weight.

Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-057

General Chemistry

Lot-Sample #...: A5G090184-007 Work Order #...: HE6XJ Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 3.6

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	96.4	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: W-070805-JH-058

TOTAL Metals

Lot-Sample #...: A5G090184-008 Matrix.....: WG
Date Sampled...: 07/08/05 Date Received..: 07/09/05

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5193030						
Mercury	ND	0.00020	mg/L	SW846 7470A	07/12/05	HE6XK1AP
		Dilution Factor: 1				
Arsenic	ND	0.010	mg/L	SW846 6010B	07/12-07/14/05	HE6XK1AK
		Dilution Factor: 1				
Antimony	ND	0.060	mg/L	SW846 6010B	07/12-07/14/05	HE6XK1AA
		Dilution Factor: 1				
Beryllium	ND	0.0050	mg/L	SW846 6010B	07/12-07/14/05	HE6XK1AC
		Dilution Factor: 1				
Lead	ND	0.0030	mg/L	SW846 6010B	07/12-07/14/05	HE6XK1AL
		Dilution Factor: 1				
dmium	ND	0.0050	mg/L	SW846 6010B	07/12-07/14/05	HE6XK1AD
		Dilution Factor: 1				
Selenium	ND	0.0050	mg/L	SW846 6010B	07/12-07/14/05	HE6XK1AM
		Dilution Factor: 1				
Chromium	ND	0.010	mg/L	SW846 6010B	07/12-07/14/05	HE6XK1AE
		Dilution Factor: 1				
Thallium	0.0067 B	0.010	mg/L	SW846 6010B	07/12-07/14/05	HE6XK1AN
		Dilution Factor: 1				
Copper	ND	0.025	mg/L	SW846 6010B	07/12-07/14/05	HE6XK1AF
		Dilution Factor: 1				
Nickel	ND	0.040	mg/L	SW846 6010B	07/12-07/14/05	HE6XK1AG
		Dilution Factor: 1				
Silver	ND	0.010	mg/L	SW846 6010B	07/12-07/14/05	HE6XK1AH
		Dilution Factor: 1				
Zinc	ND	0.020	mg/L	SW846 6010B	07/12-07/14/05	HE6XK1AJ
		Dilution Factor: 1				

NOTE(S):

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-059

TOTAL Metals

Lot-Sample #...: A5G090184-009 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 8.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199038						
Arsenic	8.5	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XL1AL
		Dilution Factor: 1				
Antimony	0.62 B	6.5	mg/kg	SW846 6010B	07/18-07/19/05	HE6XL1AC
		Dilution Factor: 1				
Beryllium	0.86 J	0.54	mg/kg	SW846 6010B	07/18-07/19/05	HE6XL1AD
		Dilution Factor: 1				
Lead	149 J	0.33	mg/kg	SW846 6010B	07/18-07/19/05	HE6XL1AM
		Dilution Factor: 1				
Cadmium	1.2	0.54	mg/kg	SW846 6010B	07/18-07/19/05	HE6XL1AE
		Dilution Factor: 1				
Selenium	ND	0.54	mg/kg	SW846 6010B	07/18-07/19/05	HE6XL1AN
		Dilution Factor: 1				
Chromium	24.2	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XL1AF
		Dilution Factor: 1				
Thallium	ND	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XL1AP
		Dilution Factor: 1				
Copper	49.6 J	2.7	mg/kg	SW846 6010B	07/18-07/19/05	HE6XL1AG
		Dilution Factor: 1				
Nickel	24.1	4.3	mg/kg	SW846 6010B	07/18-07/19/05	HE6XL1AH
		Dilution Factor: 1				
Silver	ND	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XL1AJ
		Dilution Factor: 1				
Zinc	199	2.2	mg/kg	SW846 6010B	07/18-07/19/05	HE6XL1AK
		Dilution Factor: 1				
Mercury	0.16	0.11	mg/kg	SW846 7471A	07/18/05	HE6XL1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-059

General Chemistry

Lot-Sample #...: A5G090184-009 Work Order #...: HE6XL Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 8.0

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	92.0	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-060

TOTAL Metals

Lot-Sample #...: A5G090184-010 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 8.1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199038						
Arsenic	11.1	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XN1AL
		Dilution Factor: 1				
Antimony	0.65 B	6.5	mg/kg	SW846 6010B	07/18-07/19/05	HE6XN1AC
		Dilution Factor: 1				
Beryllium	1.8 J	0.54	mg/kg	SW846 6010B	07/18-07/19/05	HE6XN1AD
		Dilution Factor: 1				
Lead	391 J	0.33	mg/kg	SW846 6010B	07/18-07/19/05	HE6XN1AM
		Dilution Factor: 1				
Cadmium	1.8	0.54	mg/kg	SW846 6010B	07/18-07/19/05	HE6XN1AE
		Dilution Factor: 1				
Selenium	ND	0.54	mg/kg	SW846 6010B	07/18-07/19/05	HE6XN1AN
		Dilution Factor: 1				
Chromium	14.2	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XN1AF
		Dilution Factor: 1				
Thallium	ND	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XN1AP
		Dilution Factor: 1				
Copper	96.5 J	2.7	mg/kg	SW846 6010B	07/18-07/19/05	HE6XN1AG
		Dilution Factor: 1				
Nickel	25.0	4.4	mg/kg	SW846 6010B	07/18-07/19/05	HE6XN1AH
		Dilution Factor: 1				
Silver	ND	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XN1AJ
		Dilution Factor: 1				
Zinc	356	2.2	mg/kg	SW846 6010B	07/18-07/19/05	HE6XN1AK
		Dilution Factor: 1				
Mercury	0.48	0.11	mg/kg	SW846 7471A	07/18/05	HE6XN1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-060

General Chemistry

Lot-Sample #...: A5G090184-010 Work Order #...: HE6XN Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 8.1

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	91.9	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-061

TOTAL Metals

Lot-Sample #...: A5G090184-011 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 9.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199038						
Arsenic	11.0	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XP1AL
		Dilution Factor: 1				
Antimony	0.56 B	6.6	mg/kg	SW846 6010B	07/18-07/19/05	HE6XP1AC
		Dilution Factor: 1				
Beryllium	0.80 J	0.55	mg/kg	SW846 6010B	07/18-07/19/05	HE6XP1AD
		Dilution Factor: 1				
Lead	89.2 J	0.33	mg/kg	SW846 6010B	07/18-07/19/05	HE6XP1AM
		Dilution Factor: 1				
Cadmium	1.4	0.55	mg/kg	SW846 6010B	07/18-07/19/05	HE6XP1AE
		Dilution Factor: 1				
Selenium	ND	0.55	mg/kg	SW846 6010B	07/18-07/19/05	HE6XP1AN
		Dilution Factor: 1				
Chromium	22.5	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XP1AF
		Dilution Factor: 1				
Thallium	0.70 B	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XP1AP
		Dilution Factor: 1				
Copper	53.6 J	2.7	mg/kg	SW846 6010B	07/18-07/19/05	HE6XP1AG
		Dilution Factor: 1				
Nickel	22.5	4.4	mg/kg	SW846 6010B	07/18-07/19/05	HE6XP1AH
		Dilution Factor: 1				
Silver	ND	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XP1AJ
		Dilution Factor: 1				
Zinc	193	2.2	mg/kg	SW846 6010B	07/18-07/19/05	HE6XP1AK
		Dilution Factor: 1				
Mercury	0.12	0.11	mg/kg	SW846 7471A	07/18/05	HE6XP1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-061

General Chemistry

Lot-Sample #...: A5G090184-011 Work Order #...: HE6XP Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 9.0

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	91.0	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-062

TOTAL Metals

Lot-Sample #...: A5G090184-012 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 2.3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199038						
Arsenic	3.7	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XQ1AL
		Dilution Factor: 1				
Antimony	0.51 B	6.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XQ1AC
		Dilution Factor: 1				
Beryllium	0.39 B,J	0.51	mg/kg	SW846 6010B	07/18-07/19/05	HE6XQ1AD
		Dilution Factor: 1				
Lead	137 J	0.31	mg/kg	SW846 6010B	07/18-07/19/05	HE6XQ1AM
		Dilution Factor: 1				
Cadmium	0.82	0.51	mg/kg	SW846 6010B	07/18-07/19/05	HE6XQ1AE
		Dilution Factor: 1				
Selenium	ND	0.51	mg/kg	SW846 6010B	07/18-07/19/05	HE6XQ1AN
		Dilution Factor: 1				
Chromium	9.3	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XQ1AF
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XQ1AP
		Dilution Factor: 1				
Copper	69.5 J	2.6	mg/kg	SW846 6010B	07/18-07/19/05	HE6XQ1AG
		Dilution Factor: 1				
Nickel	10.2	4.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XQ1AH
		Dilution Factor: 1				
Silver	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XQ1AJ
		Dilution Factor: 1				
Zinc	169	2.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XQ1AK
		Dilution Factor: 1				
Mercury	0.35	0.10	mg/kg	SW846 7471A	07/18/05	HE6XQ1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-062

General Chemistry

Lot-Sample #...: A5G090184-012 Work Order #...: HE6XQ Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 2.3

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	97.7	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-063

TOTAL Metals

Lot-Sample #...: A5G090184-013 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 0.82

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199038						
Arsenic	1.7	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XR1AL
		Dilution Factor: 1				
Antimony	ND	6.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XR1AC
		Dilution Factor: 1				
Beryllium	0.26 B,J	0.50	mg/kg	SW846 6010B	07/18-07/19/05	HE6XR1AD
		Dilution Factor: 1				
Lead	23.8 J	0.30	mg/kg	SW846 6010B	07/18-07/19/05	HE6XR1AM
		Dilution Factor: 1				
Cadmium	0.32 B	0.50	mg/kg	SW846 6010B	07/18-07/19/05	HE6XR1AE
		Dilution Factor: 1				
Selenium	ND	0.50	mg/kg	SW846 6010B	07/18-07/19/05	HE6XR1AN
		Dilution Factor: 1				
Chromium	4.3	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XR1AF
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XR1AP
		Dilution Factor: 1				
Copper	14.2 J	2.5	mg/kg	SW846 6010B	07/18-07/19/05	HE6XR1AG
		Dilution Factor: 1				
Nickel	4.4	4.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XR1AH
		Dilution Factor: 1				
Silver	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XR1AJ
		Dilution Factor: 1				
Zinc	45.8	2.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XR1AK
		Dilution Factor: 1				
Mercury	0.029 B	0.10	mg/kg	SW846 7471A	07/18/05	HE6XR1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-063

General Chemistry

Lot-Sample #...: A5G090184-013 Work Order #...: HE6XR Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 0.82

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	99.2	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-064

TOTAL Metals

Lot-Sample #...: A5G090184-014 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 8.7

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199038						
Arsenic	11.4	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XT1AL
		Dilution Factor: 1				
Antimony	1.4 B	6.6	mg/kg	SW846 6010B	07/18-07/19/05	HE6XT1AC
		Dilution Factor: 1				
Beryllium	1.1 J	0.55	mg/kg	SW846 6010B	07/18-07/19/05	HE6XT1AD
		Dilution Factor: 1				
Lead	702 J	0.33	mg/kg	SW846 6010B	07/18-07/19/05	HE6XT1AM
		Dilution Factor: 1				
Cadmium	8.4	0.55	mg/kg	SW846 6010B	07/18-07/19/05	HE6XT1AE
		Dilution Factor: 1				
Selenium	ND	0.55	mg/kg	SW846 6010B	07/18-07/19/05	HE6XT1AN
		Dilution Factor: 1				
Chromium	26.1	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XT1AF
		Dilution Factor: 1				
Thallium	ND	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XT1AP
		Dilution Factor: 1				
Copper	112 J	2.7	mg/kg	SW846 6010B	07/18-07/19/05	HE6XT1AG
		Dilution Factor: 1				
Nickel	19.9	4.4	mg/kg	SW846 6010B	07/18-07/19/05	HE6XT1AH
		Dilution Factor: 1				
Silver	0.38 B	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XT1AJ
		Dilution Factor: 1				
Zinc	615	2.2	mg/kg	SW846 6010B	07/18-07/19/05	HE6XT1AK
		Dilution Factor: 1				
Mercury	0.66	0.11	mg/kg	SW846 7471A	07/18/05	HE6XT1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-064

General Chemistry

Lot-Sample #...: A5G090184-014 Work Order #...: HE6XT Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 8.7

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	91.3	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-065

TOTAL Metals

Lot-Sample #...: A5G090184-015 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 9.1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199038						
Arsenic	5.1	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XW1AL
		Dilution Factor: 1				
Antimony	0.90 B	6.6	mg/kg	SW846 6010B	07/18-07/19/05	HE6XW1AC
		Dilution Factor: 1				
Beryllium	0.49 B,J	0.55	mg/kg	SW846 6010B	07/18-07/19/05	HE6XW1AD
		Dilution Factor: 1				
Lead	564 J	0.33	mg/kg	SW846 6010B	07/18-07/19/05	HE6XW1AM
		Dilution Factor: 1				
Cadmium	1.5	0.55	mg/kg	SW846 6010B	07/18-07/19/05	HE6XW1AE
		Dilution Factor: 1				
Selenium	ND	0.55	mg/kg	SW846 6010B	07/18-07/19/05	HE6XW1AN
		Dilution Factor: 1				
Chromium	22.2	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XW1AF
		Dilution Factor: 1				
Thallium	ND	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XW1AP
		Dilution Factor: 1				
Copper	65.9 J	2.8	mg/kg	SW846 6010B	07/18-07/19/05	HE6XW1AG
		Dilution Factor: 1				
Nickel	15.7	4.4	mg/kg	SW846 6010B	07/18-07/19/05	HE6XW1AH
		Dilution Factor: 1				
Silver	ND	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XW1AJ
		Dilution Factor: 1				
Zinc	418	2.2	mg/kg	SW846 6010B	07/18-07/19/05	HE6XW1AK
		Dilution Factor: 1				
Mercury	0.19	0.11	mg/kg	SW846 7471A	07/18/05	HE6XW1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-065

General Chemistry

Lot-Sample #...: A5G090184-015 Work Order #...: HE6XW Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 9.1

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	90.9	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-066

TOTAL Metals

Lot-Sample #...: A5G090184-016 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 1.4

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199038						
Arsenic	3.7	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XX1AL
		Dilution Factor: 1				
Antimony	0.80 B	6.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XX1AC
		Dilution Factor: 1				
Beryllium	0.50 B,J	0.51	mg/kg	SW846 6010B	07/18-07/19/05	HE6XX1AD
		Dilution Factor: 1				
Lead	479 J	0.30	mg/kg	SW846 6010B	07/18-07/19/05	HE6XX1AM
		Dilution Factor: 1				
Cadmium	2.5	0.51	mg/kg	SW846 6010B	07/18-07/19/05	HE6XX1AE
		Dilution Factor: 1				
Selenium	ND	0.51	mg/kg	SW846 6010B	07/18-07/19/05	HE6XX1AN
		Dilution Factor: 1				
Chromium	39.6	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XX1AF
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XX1AP
		Dilution Factor: 1				
Copper	210 J	2.5	mg/kg	SW846 6010B	07/18-07/19/05	HE6XX1AG
		Dilution Factor: 1				
Nickel	24.8	4.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6XX1AH
		Dilution Factor: 1				
Silver	1.8	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XX1AJ
		Dilution Factor: 1				
Zinc	535	2.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6XX1AK
		Dilution Factor: 1				
Mercury	0.28	0.10	mg/kg	SW846 7471A	07/18/05	HE6XX1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-066

General Chemistry

Lot-Sample #...: A5G090184-016 Work Order #...: HE6XX Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 1.4

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	98.6	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-067

TOTAL Metals

Lot-Sample #...: A5G090184-017 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 1.4

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199038						
Arsenic	30.7	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6X11AL
		Dilution Factor: 1				
Antimony	1.0 B	6.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6X11AC
		Dilution Factor: 1				
Beryllium	1.7 J	0.51	mg/kg	SW846 6010B	07/18-07/19/05	HE6X11AD
		Dilution Factor: 1				
Lead	288 J	0.30	mg/kg	SW846 6010B	07/18-07/19/05	HE6X11AM
		Dilution Factor: 1				
Cadmium	2.7	0.51	mg/kg	SW846 6010B	07/18-07/19/05	HE6X11AE
		Dilution Factor: 1				
Selenium	ND	0.51	mg/kg	SW846 6010B	07/18-07/19/05	HE6X11AN
		Dilution Factor: 1				
Chromium	33.0	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6X11AF
		Dilution Factor: 1				
Thallium	0.54 B	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6X11AP
		Dilution Factor: 1				
Copper	133 J	2.5	mg/kg	SW846 6010B	07/18-07/19/05	HE6X11AG
		Dilution Factor: 1				
Nickel	18.7	4.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6X11AH
		Dilution Factor: 1				
Silver	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6X11AJ
		Dilution Factor: 1				
Zinc	488	2.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6X11AK
		Dilution Factor: 1				
Mercury	1.2	0.10	mg/kg	SW846 7471A	07/18/05	HE6X11AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-067

General Chemistry

Lot-Sample #...: A5G090184-017 Work Order #...: HE6X1 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 1.4

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	98.6	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-068

TOTAL Metals

Lot-Sample #...: A5G090184-018 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 1.4

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199038						
Arsenic	19.3	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6X61AL
		Dilution Factor: 1				
Antimony	1.7 B	6.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6X61AC
		Dilution Factor: 1				
Beryllium	0.75 J	0.51	mg/kg	SW846 6010B	07/18-07/19/05	HE6X61AD
		Dilution Factor: 1				
Lead	247 J	0.30	mg/kg	SW846 6010B	07/18-07/19/05	HE6X61AM
		Dilution Factor: 1				
Cadmium	2.8	0.51	mg/kg	SW846 6010B	07/18-07/19/05	HE6X61AE
		Dilution Factor: 1				
Selenium	ND	0.51	mg/kg	SW846 6010B	07/18-07/19/05	HE6X61AN
		Dilution Factor: 1				
Chromium	28.7	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6X61AF
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6X61AP
		Dilution Factor: 1				
Copper	120 J	2.5	mg/kg	SW846 6010B	07/18-07/19/05	HE6X61AG
		Dilution Factor: 1				
Nickel	13.6	4.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6X61AH
		Dilution Factor: 1				
Silver	0.32 B	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6X61AJ
		Dilution Factor: 1				
Zinc	415	2.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6X61AK
		Dilution Factor: 1				
Mercury	0.81	0.10	mg/kg	SW846 7471A	07/18/05	HE6X61AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-068

General Chemistry

Lot-Sample #...: A5G090184-018 Work Order #...: HE6X6 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 1.4

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	98.6	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: W-070805-JH-069

TOTAL Metals

Lot-Sample #...: A5G090184-019 Matrix.....: WG
Date Sampled...: 07/08/05 Date Received..: 07/09/05

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5193030						
Mercury	ND	0.00020	mg/L	SW846 7470A	07/12/05	HE6X71AP
		Dilution Factor: 1				
Arsenic	ND	0.010	mg/L	SW846 6010B	07/12-07/14/05	HE6X71AK
		Dilution Factor: 1				
Antimony	ND	0.060	mg/L	SW846 6010B	07/12-07/14/05	HE6X71AA
		Dilution Factor: 1				
Beryllium	ND	0.0050	mg/L	SW846 6010B	07/12-07/14/05	HE6X71AC
		Dilution Factor: 1				
Lead	ND	0.0030	mg/L	SW846 6010B	07/12-07/14/05	HE6X71AL
		Dilution Factor: 1				
Cadmium	ND	0.0050	mg/L	SW846 6010B	07/12-07/14/05	HE6X71AD
		Dilution Factor: 1				
Selenium	ND	0.0050	mg/L	SW846 6010B	07/12-07/14/05	HE6X71AM
		Dilution Factor: 1				
Chromium	ND	0.010	mg/L	SW846 6010B	07/12-07/14/05	HE6X71AE
		Dilution Factor: 1				
Thallium	0.0065 B	0.010	mg/L	SW846 6010B	07/12-07/14/05	HE6X71AN
		Dilution Factor: 1				
Copper	ND	0.025	mg/L	SW846 6010B	07/12-07/14/05	HE6X71AF
		Dilution Factor: 1				
Nickel	0.0018 B	0.040	mg/L	SW846 6010B	07/12-07/14/05	HE6X71AG
		Dilution Factor: 1				
Silver	ND	0.010	mg/L	SW846 6010B	07/12-07/14/05	HE6X71AH
		Dilution Factor: 1				
Zinc	ND	0.020	mg/L	SW846 6010B	07/12-07/14/05	HE6X71AJ
		Dilution Factor: 1				

NOTE(S):

B Estimated result. Result is less than RL.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-070

TOTAL Metals

Lot-Sample #...: A5G090184-020 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 9.1

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199038						
Arsenic	3.9	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6X81AL
		Dilution Factor: 1				
Antimony	0.62 B	6.6	mg/kg	SW846 6010B	07/18-07/19/05	HE6X81AC
		Dilution Factor: 1				
Beryllium	0.57 J	0.55	mg/kg	SW846 6010B	07/18-07/19/05	HE6X81AD
		Dilution Factor: 1				
Lead	304 J	0.33	mg/kg	SW846 6010B	07/18-07/19/05	HE6X81AM
		Dilution Factor: 1				
Cadmium	5.8	0.55	mg/kg	SW846 6010B	07/18-07/19/05	HE6X81AE
		Dilution Factor: 1				
enium	ND	0.55	mg/kg	SW846 6010B	07/18-07/19/05	HE6X81AN
		Dilution Factor: 1				
Chromium	14.6	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6X81AF
		Dilution Factor: 1				
Thallium	ND	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6X81AP
		Dilution Factor: 1				
Copper	362 J	2.8	mg/kg	SW846 6010B	07/18-07/19/05	HE6X81AG
		Dilution Factor: 1				
Nickel	16.3	4.4	mg/kg	SW846 6010B	07/18-07/19/05	HE6X81AH
		Dilution Factor: 1				
Silver	0.46 B	1.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6X81AJ
		Dilution Factor: 1				
Zinc	1230	11.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6X81AK
		Dilution Factor: 5				
Mercury	0.17	0.11	mg/kg	SW846 7471A	07/18/05	HE6X81AQ
		Dilution Factor: 1				

NOTE(S):

uits and reporting limits have been adjusted for dry weight.

stimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-070

General Chemistry

Lot-Sample #...: A5G090184-020 Work Order #...: HE6X8 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 9.1

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	90.9	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-071

TOTAL Metals

Lot-Sample #...: A5G090184-021 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 3.7

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199038						
Arsenic	14.9	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6X91AL
		Dilution Factor: 1				
Antimony	1.7 B	6.2	mg/kg	SW846 6010B	07/18-07/19/05	HE6X91AC
		Dilution Factor: 1				
Beryllium	2.5 J	0.52	mg/kg	SW846 6010B	07/18-07/19/05	HE6X91AD
		Dilution Factor: 1				
Lead	132 J	0.31	mg/kg	SW846 6010B	07/18-07/19/05	HE6X91AM
		Dilution Factor: 1				
Cadmium	4.0	0.52	mg/kg	SW846 6010B	07/18-07/19/05	HE6X91AE
		Dilution Factor: 1				
lenium	ND	0.52	mg/kg	SW846 6010B	07/18-07/19/05	HE6X91AN
		Dilution Factor: 1				
Chromium	17.3	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6X91AF
		Dilution Factor: 1				
Thallium	0.67 B	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6X91AP
		Dilution Factor: 1				
Copper	122 J	2.6	mg/kg	SW846 6010B	07/18-07/19/05	HE6X91AG
		Dilution Factor: 1				
Nickel	28.0	4.2	mg/kg	SW846 6010B	07/18-07/19/05	HE6X91AH
		Dilution Factor: 1				
Silver	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE6X91AJ
		Dilution Factor: 1				
Zinc	418	2.1	mg/kg	SW846 6010B	07/18-07/19/05	HE6X91AK
		Dilution Factor: 1				
Mercury	0.089 B	0.10	mg/kg	SW846 7471A	07/18/05	HE6X91AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

stimated result. Result is less than RL.

ethod blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-071

General Chemistry

Lot-Sample #...: A5G090184-021 Work Order #...: HE6X9 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 3.7

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	96.3	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-072

TOTAL Metals

Lot-Sample #...: A5G090184-022 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 3.6

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199038						
Arsenic	45.5	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE60A1AL
		Dilution Factor: 1				
Antimony	1.2 B	6.2	mg/kg	SW846 6010B	07/18-07/19/05	HE60A1AC
		Dilution Factor: 1				
Beryllium	1.0 J,E	0.52	mg/kg	SW846 6010B	07/18-07/19/05	HE60A1AD
		Dilution Factor: 1				
Lead	350 J	0.31	mg/kg	SW846 6010B	07/18-07/19/05	HE60A1AM
		Dilution Factor: 1				
Cadmium	3.1	0.52	mg/kg	SW846 6010B	07/18-07/19/05	HE60A1AE
		Dilution Factor: 1				
lenium	ND	0.52	mg/kg	SW846 6010B	07/18-07/19/05	HE60A1AN
		Dilution Factor: 1				
Chromium	20.9	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE60A1AF
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE60A1AP
		Dilution Factor: 1				
Copper	280 J	2.6	mg/kg	SW846 6010B	07/18-07/19/05	HE60A1AG
		Dilution Factor: 1				
Nickel	22.8	4.1	mg/kg	SW846 6010B	07/18-07/19/05	HE60A1AH
		Dilution Factor: 1				
Silver	0.33 B	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HE60A1AJ
		Dilution Factor: 1				
Zinc	1290	10.4	mg/kg	SW846 6010B	07/18-07/19/05	HE60A1AK
		Dilution Factor: 5				
Mercury	0.45	0.10	mg/kg	SW846 7471A	07/18/05	HE60A1AQ
		Dilution Factor: 1				

(Continued on next page)

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-072

TOTAL Metals

Lot-Sample #...: A5G090184-022 Matrix.....: SO

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

E Matrix interference.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JB-072

General Chemistry

Lot-Sample #...: A5G090184-022 Work Order #...: HE60A Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 3.6

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	96.4	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-073

TOTAL Metals

Lot-Sample #...: A5G090184-023 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 4.8

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199033						
Arsenic	7.2	1.1	mg/kg	SW846 6010B	07/18/05	HE60C1AL
		Dilution Factor: 1				
Antimony	1.0 B	6.3	mg/kg	SW846 6010B	07/18/05	HE60C1AC
		Dilution Factor: 1				
Beryllium	0.68 J	0.53	mg/kg	SW846 6010B	07/18/05	HE60C1AD
		Dilution Factor: 1				
Lead	594	0.32	mg/kg	SW846 6010B	07/18/05	HE60C1AM
		Dilution Factor: 1				
Cadmium	4.1	0.53	mg/kg	SW846 6010B	07/18/05	HE60C1AE
		Dilution Factor: 1				
Selenium	ND	0.53	mg/kg	SW846 6010B	07/18/05	HE60C1AN
		Dilution Factor: 1				
Chromium	26.9	1.1	mg/kg	SW846 6010B	07/18/05	HE60C1AF
		Dilution Factor: 1				
Thallium	ND	1.1	mg/kg	SW846 6010B	07/18/05	HE60C1AP
		Dilution Factor: 1				
Copper	119	2.6	mg/kg	SW846 6010B	07/18/05	HE60C1AG
		Dilution Factor: 1				
Nickel	18.2	4.2	mg/kg	SW846 6010B	07/18/05	HE60C1AH
		Dilution Factor: 1				
Silver	ND	1.1	mg/kg	SW846 6010B	07/18/05	HE60C1AJ
		Dilution Factor: 1				
Zinc	566	2.1	mg/kg	SW846 6010B	07/18/05	HE60C1AK
		Dilution Factor: 1				
Mercury	0.40	0.11	mg/kg	SW846 7471A	07/18/05	HE60C1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-073

General Chemistry

Lot-Sample #...: A5G090184-023 Work Order #...: HE60C Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 4.8

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	95.2	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193426

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-074

TOTAL Metals

Lot-Sample #...: A5G090184-024 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 4.3

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199033						
Arsenic	12.8	1.0	mg/kg	SW846 6010B	07/18/05	HE60D1AL
		Dilution Factor: 1				
Antimony	0.55 B	6.3	mg/kg	SW846 6010B	07/18/05	HE60D1AC
		Dilution Factor: 1				
Beryllium	0.73 J	0.52	mg/kg	SW846 6010B	07/18/05	HE60D1AD
		Dilution Factor: 1				
Lead	59.7	0.31	mg/kg	SW846 6010B	07/18/05	HE60D1AM
		Dilution Factor: 1				
Cadmium	0.65	0.52	mg/kg	SW846 6010B	07/18/05	HE60D1AE
		Dilution Factor: 1				
Selenium	ND	0.52	mg/kg	SW846 6010B	07/18/05	HE60D1AN
		Dilution Factor: 1				
Chromium	14.8	1.0	mg/kg	SW846 6010B	07/18/05	HE60D1AF
		Dilution Factor: 1				
Thallium	0.60 B	1.0	mg/kg	SW846 6010B	07/18/05	HE60D1AP
		Dilution Factor: 1				
Copper	47.6	2.6	mg/kg	SW846 6010B	07/18/05	HE60D1AG
		Dilution Factor: 1				
Nickel	20.0	4.2	mg/kg	SW846 6010B	07/18/05	HE60D1AH
		Dilution Factor: 1				
Silver	ND	1.0	mg/kg	SW846 6010B	07/18/05	HE60D1AJ
		Dilution Factor: 1				
Zinc	147	2.1	mg/kg	SW846 6010B	07/18/05	HE60D1AK
		Dilution Factor: 1				
Mercury	0.065 B	0.10	mg/kg	SW846 7471A	07/18/05	HE60D1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-074

General Chemistry

Lot-Sample #...: A5G090184-024 Work Order #...: HE60D Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 4.3

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	95.7	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193426

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-075

TOTAL Metals

Lot-Sample #...: A5G090184-025 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 6.0

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199033						
Arsenic	6.1	1.1	mg/kg	SW846 6010B	07/18/05	HE60E1AL
		Dilution Factor: 1				
Antimony	ND	6.4	mg/kg	SW846 6010B	07/18/05	HE60E1AC
		Dilution Factor: 1				
Beryllium	0.67 J	0.53	mg/kg	SW846 6010B	07/18/05	HE60E1AD
		Dilution Factor: 1				
Lead	265	0.32	mg/kg	SW846 6010B	07/18/05	HE60E1AM
		Dilution Factor: 1				
Cadmium	0.88	0.53	mg/kg	SW846 6010B	07/18/05	HE60E1AE
		Dilution Factor: 1				
Selenium	ND	0.53	mg/kg	SW846 6010B	07/18/05	HE60E1AN
		Dilution Factor: 1				
Chromium	18.5	1.1	mg/kg	SW846 6010B	07/18/05	HE60E1AF
		Dilution Factor: 1				
Thallium	ND	1.1	mg/kg	SW846 6010B	07/18/05	HE60E1AP
		Dilution Factor: 1				
Copper	41.0	2.7	mg/kg	SW846 6010B	07/18/05	HE60E1AG
		Dilution Factor: 1				
Nickel	15.4	4.3	mg/kg	SW846 6010B	07/18/05	HE60E1AH
		Dilution Factor: 1				
Silver	ND	1.1	mg/kg	SW846 6010B	07/18/05	HE60E1AJ
		Dilution Factor: 1				
Zinc	267	2.1	mg/kg	SW846 6010B	07/18/05	HE60E1AK
		Dilution Factor: 1				
Mercury	0.66	0.11	mg/kg	SW846 7471A	07/18/05	HE60E1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-075

General Chemistry

Lot-Sample #...: A5G090184-025 Work Order #...: HE60E Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 6.0

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	94.0	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193426

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-076

TOTAL Metals

Lot-Sample #...: A5G090184-026 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 2.8

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199033						
Arsenic	5.5	1.0	mg/kg	SW846 6010B	07/18/05	HE60F1AL
		Dilution Factor: 1				
Antimony	0.77 B	6.2	mg/kg	SW846 6010B	07/18/05	HE60F1AC
		Dilution Factor: 1				
Beryllium	0.50 B,J	0.51	mg/kg	SW846 6010B	07/18/05	HE60F1AD
		Dilution Factor: 1				
Lead	550	0.31	mg/kg	SW846 6010B	07/18/05	HE60F1AM
		Dilution Factor: 1				
Cadmium	4.2	0.51	mg/kg	SW846 6010B	07/18/05	HE60F1AE
		Dilution Factor: 1				
Selenium	ND	0.51	mg/kg	SW846 6010B	07/18/05	HE60F1AN
		Dilution Factor: 1				
Chromium	27.7	1.0	mg/kg	SW846 6010B	07/18/05	HE60F1AF
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18/05	HE60F1AP
		Dilution Factor: 1				
Copper	86.9	2.6	mg/kg	SW846 6010B	07/18/05	HE60F1AG
		Dilution Factor: 1				
Nickel	19.6	4.1	mg/kg	SW846 6010B	07/18/05	HE60F1AH
		Dilution Factor: 1				
Silver	ND	1.0	mg/kg	SW846 6010B	07/18/05	HE60F1AJ
		Dilution Factor: 1				
Zinc	564	2.1	mg/kg	SW846 6010B	07/18/05	HE60F1AK
		Dilution Factor: 1				
Mercury	0.48	0.10	mg/kg	SW846 7471A	07/18/05	HE60F1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-076

General Chemistry

Lot-Sample #...: A5G090184-026 Work Order #...: HE60F Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 2.8

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	97.2	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193426

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-077

TOTAL Metals

Lot-Sample #...: A5G090184-027 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 14

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199033						
Arsenic	8.1	1.2	mg/kg	SW846 6010B	07/18/05	HE60G1AL
		Dilution Factor: 1				
Antimony	ND	7.0	mg/kg	SW846 6010B	07/18/05	HE60G1AC
		Dilution Factor: 1				
Beryllium	0.61 J	0.58	mg/kg	SW846 6010B	07/18/05	HE60G1AD
		Dilution Factor: 1				
Lead	193	0.35	mg/kg	SW846 6010B	07/18/05	HE60G1AM
		Dilution Factor: 1				
Cadmium	2.8	0.58	mg/kg	SW846 6010B	07/18/05	HE60G1AE
		Dilution Factor: 1				
Selenium	ND	0.58	mg/kg	SW846 6010B	07/18/05	HE60G1AN
		Dilution Factor: 1				
Chromium	21.6	1.2	mg/kg	SW846 6010B	07/18/05	HE60G1AF
		Dilution Factor: 1				
Thallium	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE60G1AP
		Dilution Factor: 1				
Copper	45.8	2.9	mg/kg	SW846 6010B	07/18/05	HE60G1AG
		Dilution Factor: 1				
Nickel	21.8	4.7	mg/kg	SW846 6010B	07/18/05	HE60G1AH
		Dilution Factor: 1				
Silver	ND	1.2	mg/kg	SW846 6010B	07/18/05	HE60G1AJ
		Dilution Factor: 1				
Zinc	752	2.3	mg/kg	SW846 6010B	07/18/05	HE60G1AK
		Dilution Factor: 1				
Mercury	ND	0.12	mg/kg	SW846 7471A	07/18/05	HE60G1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-077

General Chemistry

Lot-Sample #...: A5G090184-027 Work Order #...: HE60G Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	85.6	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193426

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-078

TOTAL Metals

Lot-Sample #...: A5G090184-028 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 3.8

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 5199033						
Arsenic	9.5	1.0	mg/kg	SW846 6010B	07/18/05	HE60H1AL
		Dilution Factor: 1				
Antimony	2.4 B	6.2	mg/kg	SW846 6010B	07/18/05	HE60H1AC
		Dilution Factor: 1				
Beryllium	0.73 J	0.52	mg/kg	SW846 6010B	07/18/05	HE60H1AD
		Dilution Factor: 1				
Lead	716	0.31	mg/kg	SW846 6010B	07/18/05	HE60H1AM
		Dilution Factor: 1				
Cadmium	3.3	0.52	mg/kg	SW846 6010B	07/18/05	HE60H1AE
		Dilution Factor: 1				
Selenium	ND	0.52	mg/kg	SW846 6010B	07/18/05	HE60H1AN
		Dilution Factor: 1				
Chromium	23.6	1.0	mg/kg	SW846 6010B	07/18/05	HE60H1AF
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18/05	HE60H1AP
		Dilution Factor: 1				
Copper	280	2.6	mg/kg	SW846 6010B	07/18/05	HE60H1AG
		Dilution Factor: 1				
Nickel	24.0	4.2	mg/kg	SW846 6010B	07/18/05	HE60H1AH
		Dilution Factor: 1				
Silver	0.46 B	1.0	mg/kg	SW846 6010B	07/18/05	HE60H1AJ
		Dilution Factor: 1				
Zinc	844	2.1	mg/kg	SW846 6010B	07/18/05	HE60H1AK
		Dilution Factor: 1				
Mercury	0.96	0.10	mg/kg	SW846 7471A	07/18/05	HE60H1AQ
		Dilution Factor: 1				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

B Estimated result. Result is less than RL.

J Method blank contamination. The associated method blank contains the target analyte at a reportable level.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-070805-JH-078

General Chemistry

Lot-Sample #...: A5G090184-028 Work Order #...: HE60H Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05
% Moisture.....: 3.8

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	96.2	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193426

Dilution Factor: 1

SEVERN TRENT STL

QUALITY CONTROL SECTION

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A5G090184 Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A5G120000-030 Prep Batch #...: 5193030						
Mercury	ND	0.00020	mg/L	SW846 7470A	07/12/05	HE87R1CT
		Dilution Factor: 1				
Antimony	ND	0.060	mg/L	SW846 6010B	07/12-07/14/05	HE87R1AF
		Dilution Factor: 1				
Arsenic	ND	0.010	mg/L	SW846 6010B	07/12-07/14/05	HE87R1AA
		Dilution Factor: 1				
Beryllium	ND	0.0050	mg/L	SW846 6010B	07/12-07/14/05	HE87R1AH
		Dilution Factor: 1				
Lead	ND	0.0030	mg/L	SW846 6010B	07/12-07/14/05	HE87R1AC
		Dilution Factor: 1				
Cadmium	ND	0.0050	mg/L	SW846 6010B	07/12-07/14/05	HE87R1AJ
		Dilution Factor: 1				
lenium	ND	0.0050	mg/L	SW846 6010B	07/12-07/14/05	HE87R1AD
		Dilution Factor: 1				
Chromium	ND	0.010	mg/L	SW846 6010B	07/12-07/14/05	HE87R1AL
		Dilution Factor: 1				
Thallium	ND	0.010	mg/L	SW846 6010B	07/12-07/14/05	HE87R1CU
		Dilution Factor: 1				
Copper	0.0024 B	0.025	mg/L	SW846 6010B	07/12-07/14/05	HE87R1AN
		Dilution Factor: 1				
Nickel	ND	0.040	mg/L	SW846 6010B	07/12-07/14/05	HE87R1AT
		Dilution Factor: 1				
Silver	ND	0.010	mg/L	SW846 6010B	07/12-07/14/05	HE87R1AV
		Dilution Factor: 1				
Zinc	0.014 B	0.020	mg/L	SW846 6010B	07/12-07/14/05	HE87R1A0
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A5G090184 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A5G180000-033 Prep Batch #...: 5199033						
Antimony	ND	6.0	mg/kg	SW846 6010B	07/18/05	HFNTD1AA
		Dilution Factor: 1				
Arsenic	ND	1.0	mg/kg	SW846 6010B	07/18/05	HFNTD1AK
		Dilution Factor: 1				
Beryllium	0.052 B	0.50	mg/kg	SW846 6010B	07/18/05	HFNTD1AC
		Dilution Factor: 1				
Lead	ND	0.30	mg/kg	SW846 6010B	07/18/05	HFNTD1AL
		Dilution Factor: 1				
Cadmium	ND	0.50	mg/kg	SW846 6010B	07/18/05	HFNTD1AD
		Dilution Factor: 1				
Selenium	ND	0.50	mg/kg	SW846 6010B	07/18/05	HFNTD1AM
		Dilution Factor: 1				
Chromium	ND	1.0	mg/kg	SW846 6010B	07/18/05	HFNTD1AE
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18/05	HFNTD1AN
		Dilution Factor: 1				
Copper	ND	2.5	mg/kg	SW846 6010B	07/18/05	HFNTD1AF
		Dilution Factor: 1				
Nickel	ND	4.0	mg/kg	SW846 6010B	07/18/05	HFNTD1AG
		Dilution Factor: 1				
Silver	ND	1.0	mg/kg	SW846 6010B	07/18/05	HFNTD1AH
		Dilution Factor: 1				
Zinc	ND	2.0	mg/kg	SW846 6010B	07/18/05	HFNTD1AJ
		Dilution Factor: 1				
Mercury	ND	0.10	mg/kg	SW846 7471A	07/18/05	HFNTD1AP
		Dilution Factor: 1				

(Continued on next page)

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A5G090184 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A5G180000-038 Prep Batch #...: 5199038						
Antimony	ND	6.0	mg/kg	SW846 6010B	07/18-07/19/05	HFNTM1AA
		Dilution Factor: 1				
Arsenic	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HFNTM1AK
		Dilution Factor: 1				
Beryllium	0.085 B	0.50	mg/kg	SW846 6010B	07/18-07/19/05	HFNTM1AC
		Dilution Factor: 1				
Lead	0.25 B	0.30	mg/kg	SW846 6010B	07/18-07/19/05	HFNTM1AL
		Dilution Factor: 1				
Cadmium	ND	0.50	mg/kg	SW846 6010B	07/18-07/19/05	HFNTM1AD
		Dilution Factor: 1				
Selenium	ND	0.50	mg/kg	SW846 6010B	07/18-07/19/05	HFNTM1AM
		Dilution Factor: 1				
romium	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HFNTM1AE
		Dilution Factor: 1				
Thallium	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HFNTM1AN
		Dilution Factor: 1				
Copper	0.74 B	2.5	mg/kg	SW846 6010B	07/18-07/19/05	HFNTM1AF
		Dilution Factor: 1				
Nickel	ND	4.0	mg/kg	SW846 6010B	07/18-07/19/05	HFNTM1AG
		Dilution Factor: 1				
Silver	ND	1.0	mg/kg	SW846 6010B	07/18-07/19/05	HFNTM1AH
		Dilution Factor: 1				
Zinc	ND	2.0	mg/kg	SW846 6010B	07/18-07/19/05	HFNTM1AJ
		Dilution Factor: 1				
Mercury	ND	0.10	mg/kg	SW846 7471A	07/18/05	HFNTM1AP
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

B Estimated result. Result is less than RL.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A5G090184 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids		Work Order #: HFDQR1AA		MB Lot-Sample #:	A5G120000-425	
	ND	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193425
		Dilution Factor: 1				
Percent Solids		Work Order #: HFDQV1AA		MB Lot-Sample #:	A5G120000-426	
	ND	10.0	%	MCAWW 160.3 MOD	07/12-07/13/05	5193426
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A5G090184 Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A5G120000-030 Prep Batch #...: 5193030					
Mercury	95	(82 - 131)	SW846 7470A Dilution Factor: 1	07/12/05	HE87R1CX
Arsenic	90	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/14/05	HE87R1A2
Antimony	93	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/14/05	HE87R1A6
Lead	90	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/14/05	HE87R1A3
Beryllium	93	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/14/05	HE87R1A8
Selenium	94	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/14/05	HE87R1A4
Cadmium	93	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/14/05	HE87R1A9
Chromium	95	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/14/05	HE87R1CC
Thallium	93	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/14/05	HE87R1C0
Copper	97	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/14/05	HE87R1CE
Nickel	91	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/14/05	HE87R1CJ
Silver	107	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/14/05	HE87R1CL
Zinc	94	(80 - 120)	SW846 6010B Dilution Factor: 1	07/12-07/14/05	HE87R1CP

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A5G090184 Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A5G180000-033 Prep Batch #...: 5199033					
Antimony	91	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1AQ
Arsenic	92	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1A1
Beryllium	101	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1AR
Lead	95	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1A2
Cadmium	97	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1AT
Selenium	93	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1A3
Chromium	98	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1AU
Thallium	95	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1A4
Copper	101	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1AV
Nickel	91	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1AW
Silver	108	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1AX
Zinc	97	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18/05	HFNTD1A0
Mercury	93	(73 - 123)	SW846 7471A Dilution Factor: 1	07/18/05	HFNTD1A5

(Continued on next page)

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A5G090184 Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#:	A5G180000-038	Prep Batch #...: 5199038			
Antimony	90	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTM1AQ
Arsenic	89	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTM1A1
Beryllium	100	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTM1AR
Lead	93	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTM1A2
Cadmium	96	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTM1AT
Selenium	92	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTM1A3
Chromium	93	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTM1AU
Thallium	93	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTM1A4
Copper	99	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTM1AV
Nickel	94	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTM1AW
Silver	108	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTM1AX
Zinc	96	(80 - 120)	SW846 6010B Dilution Factor: 1	07/18-07/19/05	HFNTM1A0
Mercury	91	(73 - 123)	SW846 7471A Dilution Factor: 1	07/18/05	HFNTM1A5

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A5G090184 Matrix.....: WATER
Date Sampled...: 06/27/05 16:20 Date Received..: 07/02/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A5G020106-001 Prep Batch #...: 5193030							
Mercury	99	(68 - 149)			SW846 7470A	07/12/05	HETWL1DV
	104	(68 - 149)	4.3	(0-20)	SW846 7470A	07/12/05	HETWL1DW
		Dilution Factor: 1					
Antimony	106	(75 - 125)			SW846 6010B	07/12-07/14/05	HETWL1CJ
	105	(75 - 125)	0.44	(0-20)	SW846 6010B	07/12-07/14/05	HETWL1CK
		Dilution Factor: 1					
Arsenic	102	(75 - 125)			SW846 6010B	07/12-07/14/05	HETWL1A9
	102	(75 - 125)	0.04	(0-20)	SW846 6010B	07/12-07/14/05	HETWL1CA
		Dilution Factor: 1					
Beryllium	104	(75 - 125)			SW846 6010B	07/12-07/14/05	HETWL1CN
	104	(75 - 125)	0.12	(0-20)	SW846 6010B	07/12-07/14/05	HETWL1CP
		Dilution Factor: 1					
Lead	99	(75 - 125)			SW846 6010B	07/12-07/14/05	HETWL1CC
	99	(75 - 125)	0.14	(0-20)	SW846 6010B	07/12-07/14/05	HETWL1CD
		Dilution Factor: 1					
Cadmium	102	(75 - 125)			SW846 6010B	07/12-07/14/05	HETWL1CQ
	102	(75 - 125)	0.08	(0-20)	SW846 6010B	07/12-07/14/05	HETWL1CR
		Dilution Factor: 1					
Selenium	105	(75 - 125)			SW846 6010B	07/12-07/14/05	HETWL1CE
	105	(75 - 125)	0.02	(0-20)	SW846 6010B	07/12-07/14/05	HETWL1CF
		Dilution Factor: 1					
Chromium	105	(75 - 125)			SW846 6010B	07/12-07/14/05	HETWL1CV
	106	(75 - 125)	0.46	(0-20)	SW846 6010B	07/12-07/14/05	HETWL1CW
		Dilution Factor: 1					
Thallium	103	(75 - 125)			SW846 6010B	07/12-07/14/05	HETWL1D0
	104	(75 - 125)	0.30	(0-20)	SW846 6010B	07/12-07/14/05	HETWL1D1
		Dilution Factor: 1					
Copper	109	(75 - 125)			SW846 6010B	07/12-07/14/05	HETWL1C1
	109	(75 - 125)	0.14	(0-20)	SW846 6010B	07/12-07/14/05	HETWL1C2
		Dilution Factor: 1					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A5G090184 **Matrix.....:** WATER
Date Sampled...: 06/27/05 16:20 **Date Received..:** 07/02/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Nickel	101	(75 - 125)			SW846 6010B	07/12-07/14/05	HETWL1C9
	100	(75 - 125)	0.25	(0-20)	SW846 6010B	07/12-07/14/05	HETWL1DA
		Dilution Factor: 1					
Silver	119	(75 - 125)			SW846 6010B	07/12-07/14/05	HETWL1DE
	119	(75 - 125)	0.01	(0-20)	SW846 6010B	07/12-07/14/05	HETWL1DF
		Dilution Factor: 1					
Zinc	105	(75 - 125)			SW846 6010B	07/12-07/14/05	HETWL1DL
	104	(75 - 125)	0.76	(0-20)	SW846 6010B	07/12-07/14/05	HETWL1DM
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A5G090184 Matrix.....: SOLID
Date Sampled...: 07/07/05 Date Received..: 07/08/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A5G080236-043 Prep Batch #...: 5199033						% Moisture.....: 16	
Antimony	65 N	(75 - 125)			SW846 6010B	07/18/05	HE4PM1AR
	66 N	(75 - 125)	2.2	(0-20)	SW846 6010B	07/18/05	HE4PM1AT
		Dilution Factor: 1					
Arsenic	87	(75 - 125)			SW846 6010B	07/18/05	HE4PM1CA
	84	(75 - 125)	2.7	(0-20)	SW846 6010B	07/18/05	HE4PM1CC
		Dilution Factor: 1					
Beryllium	94	(75 - 125)			SW846 6010B	07/18/05	HE4PM1AU
	92	(75 - 125)	2.8	(0-20)	SW846 6010B	07/18/05	HE4PM1AV
		Dilution Factor: 1					
Lead	85	(75 - 125)			SW846 6010B	07/18/05	HE4PM1CD
	82	(75 - 125)	3.0	(0-20)	SW846 6010B	07/18/05	HE4PM1CE
		Dilution Factor: 1					
Cadmium	85	(75 - 125)			SW846 6010B	07/18/05	HE4PM1AW
	83	(75 - 125)	2.6	(0-20)	SW846 6010B	07/18/05	HE4PM1AX
		Dilution Factor: 1					
Selenium	88	(75 - 125)			SW846 6010B	07/18/05	HE4PM1CF
	86	(75 - 125)	3.0	(0-20)	SW846 6010B	07/18/05	HE4PM1CG
		Dilution Factor: 1					
Chromium	94	(75 - 125)			SW846 6010B	07/18/05	HE4PM1A0
	90	(75 - 125)	3.1	(0-20)	SW846 6010B	07/18/05	HE4PM1A1
		Dilution Factor: 1					
Thallium	86	(75 - 125)			SW846 6010B	07/18/05	HE4PM1CH
	84	(75 - 125)	2.6	(0-20)	SW846 6010B	07/18/05	HE4PM1CJ
		Dilution Factor: 1					
Copper	91	(75 - 125)			SW846 6010B	07/18/05	HE4PM1A2
	87	(75 - 125)	3.4	(0-20)	SW846 6010B	07/18/05	HE4PM1A3
		Dilution Factor: 1					
Nickel	81	(75 - 125)			SW846 6010B	07/18/05	HE4PM1A4
	78	(75 - 125)	2.9	(0-20)	SW846 6010B	07/18/05	HE4PM1A5
		Dilution Factor: 1					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A5G090184 Matrix.....: SOLID
Date Sampled...: 07/07/05 Date Received..: 07/08/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	106	(75 - 125)			SW846 6010B	07/18/05	HE4PM1A6
	103	(75 - 125)	2.9	(0-20)	SW846 6010B	07/18/05	HE4PM1A7
		Dilution Factor: 1					
Zinc	89	(75 - 125)			SW846 6010B	07/18/05	HE4PM1A8
	85	(75 - 125)	2.9	(0-20)	SW846 6010B	07/18/05	HE4PM1A9
		Dilution Factor: 1					
Mercury	104	(10 - 199)			SW846 7471A	07/18/05	HE4PM1CK
	293 N,*	(10 - 199)	95	(0-50)	SW846 7471A	07/18/05	HE4PM1CL
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

* Relative percent difference (RPD) is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A5G090184 Matrix.....: SO
Date Sampled...: 07/08/05 Date Received..: 07/09/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A5G090184-001 Prep Batch #...: 5199038							
Antimony	75	(75 - 125)			SW846 6010B	07/18-07/19/05	HE6W91AR
	77	(75 - 125)	2.4	(0-20)	SW846 6010B	07/18-07/19/05	HE6W91AT
		Dilution Factor: 1					
Arsenic	84	(75 - 125)			SW846 6010B	07/18-07/19/05	HE6W91CA
	88	(75 - 125)	4.4	(0-20)	SW846 6010B	07/18-07/19/05	HE6W91CC
		Dilution Factor: 1					
Beryllium	92	(75 - 125)			SW846 6010B	07/18-07/19/05	HE6W91AU
	98	(75 - 125)	5.5	(0-20)	SW846 6010B	07/18-07/19/05	HE6W91AV
		Dilution Factor: 1					
Lead	0.0 N	(75 - 125)			SW846 6010B	07/18-07/19/05	HE6W91CD
	334 N	(75 - 125)	0.0	(0-20)	SW846 6010B	07/18-07/19/05	HE6W91CE
		Dilution Factor: 1					
Cadmium	78	(75 - 125)			SW846 6010B	07/18-07/19/05	HE6W91AW
	99	(75 - 125)	18	(0-20)	SW846 6010B	07/18-07/19/05	HE6W91AX
		Dilution Factor: 1					
Selenium	86	(75 - 125)			SW846 6010B	07/18-07/19/05	HE6W91CF
	89	(75 - 125)	3.9	(0-20)	SW846 6010B	07/18-07/19/05	HE6W91CG
		Dilution Factor: 1					
Chromium	83	(75 - 125)			SW846 6010B	07/18-07/19/05	HE6W91A0
	96	(75 - 125)	11	(0-20)	SW846 6010B	07/18-07/19/05	HE6W91A1
		Dilution Factor: 1					
Thallium	85	(75 - 125)			SW846 6010B	07/18-07/19/05	HE6W91CH
	89	(75 - 125)	4.7	(0-20)	SW846 6010B	07/18-07/19/05	HE6W91CJ
		Dilution Factor: 1					
Copper	NC,MSB	(75 - 125)			SW846 6010B	07/18-07/19/05	HE6W91A2
	NC,MSB	(75 - 125)		(0-20)	SW846 6010B	07/18-07/19/05	HE6W91A3
		Dilution Factor: 1					
Nickel	81	(75 - 125)			SW846 6010B	07/18-07/19/05	HE6W91A4
	90	(75 - 125)	9.6	(0-20)	SW846 6010B	07/18-07/19/05	HE6W91A5
		Dilution Factor: 1					

(Continued on next page)

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A5G090184 **Matrix.....:** SO
Date Sampled...: 07/08/05 **Date Received..:** 07/09/05

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Silver	100	(75 - 125)			SW846 6010B	07/18-07/19/05	HE6W91A6
	108	(75 - 125)	7.2	(0-20)	SW846 6010B	07/18-07/19/05	HE6W91A7
		Dilution Factor: 1					
Zinc	NC,MSB	(75 - 125)			SW846 6010B	07/18-07/19/05	HE6W91A8
	NC,MSB	(75 - 125)		(0-20)	SW846 6010B	07/18-07/19/05	HE6W91A9
		Dilution Factor: 1					
Mercury	129	(10 - 199)			SW846 7471A	07/18/05	HE6W91CK
	112	(10 - 199)	5.8	(0-50)	SW846 7471A	07/18/05	HE6W91CL
		Dilution Factor: 1					

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

N Spiked analyte recovery is outside stated control limits.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A5G090184 Work Order #...: HE6X8-SMP Matrix.....: SO
HE6X8-DUP

Date Sampled...: 07/08/05 Date Received..: 07/09/05

% Moisture.....: 9.1

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #:	A5G090184-020	
	90.9	91.9	%	1.2	(0-20)	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A5G090184 **Work Order #...:** HE60A-SMP HE60A-DUP **Matrix.....:** SO

Date Sampled...: 07/08/05 **Date Received..:** 07/09/05

% Moisture.....: 3.6

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #:	A5G090184-022	
	96.4	97.5	%	1.1	(0-20)	MCAWW 160.3 MOD	07/12-07/13/05	5193425

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A5G090184 Work Order #...: HE6HM-SMP Matrix.....: SOLID
HE6HM-DUP

Date Sampled...: 07/07/05 15:22 Date Received..: 07/09/05

% Moisture.....: 2.9

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #:	A5G090126-018	
	97.1	97.1	%	0.033	(0-20)	MCAWW 160.3 MOD	07/12-07/13/05	5193426

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A5G090184 Work Order #...: HE6HP-SMP Matrix.....: SOLID
HE6HP-DUP

Date Sampled...: 07/07/05 16:50 Date Received..: 07/09/05

% Moisture.....: 8.8

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #:	A5G090126-020	
	91.2	85.4	%	6.6	(0-20)	MCAWW 160.3 MOD	07/12-07/13/05	5193426

Dilution Factor: 1

p1

CONESTOGA-ROVERS & ASSOCIATES
8615 W. Bryn Mawr Avenue
Chicago, Illinois 60631
(773)380-9933 phone
(773)380-6421 fax

SHIPPED TO (Laboratory Name): STL N. Canton

REFERENCE NUMBER: 39826

PROJECT NAME: H. Kramer

CHAIN-OF-CUSTODY RECORD

SAMPLER'S SIGNATURE: John Hargers **PRINTED NAME:** John Hargers

SEQ. No.	DATE	TIME	SAMPLE IDENTIFICATION No.	SAMPLE MATRIX	No. OF CONTAINERS	PARAMETERS: Priority Poll. metals	REMARKS
	7/8/05		S-070805-JH-051	Soil	1	✓	
			052		1	✓	
			053		1	✓	
			054		1	✓	
			055		1	✓	
			056		1	✓	
			057		1	✓	
			W-070805-JH-058	water	1	✓	
			S-070805-JH-059	soil	1	✓	
			060		1	✓	
			061		1	✓	
			062		1	✓	
			063		1	✓	
			064		1	✓	
			065		1	✓	
			TOTAL NUMBER OF CONTAINERS		15		

RELINQUISHED BY: ① John Hargers	DATE: 7/8/05 TIME: 1900	RECEIVED BY: ②	DATE: TIME:
RELINQUISHED BY: ②	DATE: TIME:	RECEIVED BY: ③	DATE: TIME:
RELINQUISHED BY: ③	DATE: TIME:	RECEIVED BY: ④	DATE: TIME:

METHOD OF SHIPMENT: Fed-X **AIR BILL No.**

White -Fully Executed Copy
Yellow -Receiving Laboratory Copy
Pink -Shipper Copy
Goldenrod -Sampler Copy

SAMPLE TEAM:

RECEIVED FOR LABORATORY BY: [signature] 13255
DATE: 2/9/05 TIME: 10:00

1001-00(SOURCE)GN-CO004

90

L North Canton

HK 01597

p2

CONESTOGA-ROVERS & ASSOCIATES
8615 W. Bryn Mawr Avenue
Chicago, Illinois 60631
(773)380-9933 phone
(773)380-6421 fax

SHIPPED TO (Laboratory Name): STL N. Canton

REFERENCE NUMBER: 39826

PROJECT NAME: H Kramer

CHAIN-OF-CUSTODY RECORD

SAMPLER'S SIGNATURE: [signature] **PRINTED NAME:** John Hargens

SEQ. No.	DATE	TIME	SAMPLE IDENTIFICATION No.	SAMPLE MATRIX	No. OF CONTAINERS	PARAMETERS priority poll. metals	REMARKS
	7/8/05		S-070805-JH-066	soil	1	✓	
			067		1	✓	
			068		1	✓	
			W-070805-JH-069	water	1	✓	
			S-070805-JH-070	soil	1	✓	
			071		1	✓	
			072		1	✓	
			073		1	✓	
			074		1	✓	
			075		1	✓	
			076		1	✓	
			077		1	✓	
			078		1	✓	
			TOTAL NUMBER OF CONTAINERS		13	+15 = 28	

RELINQUISHED BY: ① [signature]	DATE: 7/8/05 TIME: 1900	RECEIVED BY: ②	DATE: TIME:
RELINQUISHED BY: ②	DATE: TIME:	RECEIVED BY: ③	DATE: TIME:
RELINQUISHED BY: ③	DATE: TIME:	RECEIVED BY: ④	DATE: TIME:

METHOD OF SHIPMENT: Fed-X **AIR BILL No.**

White -Fully Executed Copy
Yellow -Receiving Laboratory Copy
Pink -Shipper Copy
Goldenrod -Sampler Copy

SAMPLE TEAM:

RECEIVED FOR LABORATORY BY: [signature] 13256
DATE: 7/9/05 TIME: 1000

1001-00[illegible]RCE)GN-CO004

91

TL North Canton

HK 01598

STL Cooler Receipt Form/Narrative Lot Number: A5 6090184
North Canton Facility

Client: CRA Project: H. Kramer Quote#: 65072
Cooler Received on: 7/9/05 Opened on: 7/9/05 by: [signature] (Signature)

Fedx ☒ Client Drop Off ☐ UPS ☐ DHL ☐ FAS ☐ Other:_____
STL Cooler No# M105 Foam Box ☐ Client Cooler ☐ Other___

1. Were custody seals on the outside of the cooler? Yes ☐ No ☒ Intact? Yes ☐ No ☐ NA ☒
   If YES, Quantity_____
   Were the custody seals signed and dated? Yes ☐ No ☐ NA ☒
2. Shipper's packing slip attached to this form? Yes ☒ No ☐ NA ☐
3. Did custody papers accompany the samples? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Did you sign the custody papers in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☐ Foam ☐ None ☐ Other: Cardboard box
6. Cooler temperature upon receipt 2.3 °C (see back of form for multiple coolers/temp)

METHOD: Temp Vial ☐ Coolant & Sample ☐ Against Bottles ☐ IR ☒ ICE/H_2O Slurry ☐
COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐

7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels and/or tags be reconciled with the COC? Yes ☒ No ☐
9. Were samples at the correct pH? (record below/on back) Yes ☒ No ☐ NA ☐
10. Were correct bottles used for the tests indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☐ NA ☒
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐

Contacted PM _____ Date:_____ by:_____ via Voice Mail ☐ Verbal ☐ Other ☐
Concerning:_____

√

1. CHAIN OF CUSTODY

The following discrepancies occurred:

2. SAMPLE CONDITION

Sample(s)_____ were received after the recommended holding time had expired.
Sample(s)_____ were received in a broken container.

3. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in sample receiving to meet recommended pH level(s). *Nitric Acid Lot # 051105-HNO3; Sulfuric Acid Lot # 102804-H2SO4; Sodium Hydroxide Lot # -041305 -NaOH; Hydrochloric Acid Lot # 100504-HCl; Sodium Hydroxide and Zinc Acetate Lot # 071604-CH3COO2ZN/NaOH*
Sample(s)_____ were received with bubble > 6 mm in diameter (cc: PM)

4. Other (see below or back)

Client ID	pH	Date	Initials
058	<2	7/9/05	[illegible]
069	<2		

North Canton

SOP: NC-SC-0005, Sample Receiving
N:\QAQC\WARRATT\STL\Cooler Receipt STL\COOLER_STL_Rev49 062203.doc

HK 01599

STL Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler	Temp	Method	Coolant

Discrepancies Cont.

SEVERN TRENT STL

END OF REPORT

APPENDIX L

DATA VALIDATION MEMORANDUM - PHASE 2

CHICAGO FILE COPY

CONESTOGA-ROVERS & ASSOCIATES

8615 W. Bryn Mawr Avenue, Chicago, Illinois 60631
Telephone: (773) 380-9933 Fax: (773) 380-6421
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MEMORANDUM

TO: Walt Pochron

REF. NO.: 039826

FROM: Julie Czech/lg/3

DATE: August 1, 2005

RE: **Data Quality Assessment and Validation for Soil Samples Collected from the H. Kramer Site in Chicago, Illinois**

The following details a data quality assessment and validation for soil samples collected July 7-8, 2005 from the H. Kramer Site in Chicago, Illinois. The samples identified in Table 1 were analyzed for the parameters listed in Table 2 by Severn Trent Laboratories of North Canton, Ohio. The analytical methods are identified in Table 2. The quality assurance criteria used to assess the data were established by the method[1].

Holding Time Periods

The holding time periods are presented in Table 3. The samples were prepared and analyzed within the required holding time periods.

ethod Blank Samples

Contamination of samples contributed by laboratory conditions or procedures was monitored by the data from concurrent preparation and analysis of method blank samples. Table 4 presents the sample data that should be qualified. The remaining method blank sample data were acceptable.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Sample Analyses

To assess the accuracy and precision of the analytical methods relative to the sample matrices, MS/MSD percent recoveries and relative percent differences (RPDs) were determined. Table 5 presents the sample data that should be qualified. The remaining MS/MSD sample data were acceptable.

Laboratory Control Sample (LCS) Analyses

The accuracy of the analyses was assessed by evaluating the percent recovery data from LCS analyses. The LCS percent recovery data were acceptable.

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[1] Application of quality assurance criteria was consistent with the relevant criteria in "USEPA Contract Laboratory rogram National Functional Guidelines for Inorganic Data Review", EPA 540/R-94-013, February 1994.

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ICP Serial Dilution Sample Analyses

To determine the presence of significant physical or chemical interferences attributable to the sample matrix, ICP serial dilution samples were analyzed. Table 6 presents the sample data that should be qualified. The remaining serial dilution sample data were acceptable or the sample data were previously qualified and additional qualification was deemed unnecessary.

Field Quality Assurance/Quality Control (QA/QC)

The field QA/QC consisted of four field (equipment rinsate) blank samples and four field duplicate sample sets.

To monitor the effectiveness of field equipment decontamination procedures, four field blank samples were collected and submitted to the laboratory for analysis. Table 7 presents the sample data that should be qualified. The remaining blank sample data were acceptable.

Overall precision for the sampling and analysis event was monitored using the results of the field duplicate sample sets. Table 8 summarizes the results of the detected analytes in the field duplicate sample sets. An RPD limit of 50 percent for soil field duplicate sample data (for sample results greater than or equal to five times their respective reporting limits) was used as the acceptance criteria. Table 9 presents the sample data that should be qualified. The remaining RPD data were acceptable or the sample data were previously qualified and additional qualification was deemed unnecessary.

Overall Assessment

The data were found to exhibit acceptable levels of accuracy and are suitable for their intended use with the qualifications presented herein.

Attachments

TABLE 1

SAMPLE IDENTIFICATION NUMBERS
H. KRAMER SITE
CHICAGO, ILLINOIS

Sample ID

S-070705-JH-001	S-070705-JH-027	S-070805-JH-053
S-070705-JH-002	S-070705-JH-028	S-070805-JH-054
S-070705-JH-003	S-070705-JH-029	S-070805-JH-055
S-070705-JH-004	S-070705-JH-030	S-070805-JH-056
S-070705-JH-005	S-070705-JH-031	S-070805-JH-057
S-070705-JH-006	S-070705-JH-032	W-070805-JH-058
S-070705-JH-007	S-070705-JH-033	S-070805-JH-059
S-070705-JH-008	S-070705-JH-034	S-070805-JH-060
S-070705-JH-009	S-070705-JH-035	S-070805-JH-061
S-070705-JH-010	S-070705-JH-036	S-070805-JH-062
S-070705-JH-011	S-070705-JH-037	S-070805-JH-063
S-070705-JH-012	S-070705-JH-038	S-070805-JH-064
S-070705-JH-013	W-070705-JH-039	S-070805-JH-065
S-070705-JH-014	S-070705-JH-040	S-070805-JH-066
S-070705-JH-015	S-070705-JH-041	S-070805-JH-067
S-070705-JH-016	S-070705-JH-042	S-070805-JH-068
W-070705-JH-017	S-070705-JH-043	W-070805-JH-069
S-070705-JH-018	S-070705-JH-044	S-070805-JH-070
S-070705-JH-019	S-070705-JH-045	S-070805-JH-071
S-070705-JH-020	S-070705-JH-046	S-070805-JH-072
S-070705-JH-021	S-070705-JH-047	S-070805-JH-073
S-070705-JH-022	S-070705-JH-048	S-070805-JH-074
S-070705-JH-023	S-070705-JH-049	S-070805-JH-075
S-070705-JH-024	S-070705-JH-050	S-070805-JH-076
S-070705-JH-025	S-070805-JH-051	S-070805-JH-077
S-070705-JH-026	S-070805-JH-052	S-070805-JH-078

TABLE 2

SUMMARY OF ANALYTICAL METHODS
H. KRAMER SITE
CHICAGO, ILLINOIS

Parameter [1]	*Analytical Method* [2]	
Priority Pollutant Metals	SW-846	6010B/7471A/7470A

[1] SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", EPA SW-846, 3rd Edition with Updates I through III, November 1986.

TABLE 3

HOLDING TIME PERIODS
H. KRAMER SITE
CHICAGO, ILLINOIS

Parameter		*Holding Time Period*
Priority Pollutant Metals	-	180 days from sample collection to completion of analysis (mercury - 28 days)

CRA 09826M-3-T3

TABLE 4

QUALIFICATION OF SAMPLE DATA AS A RESULT OF
METHOD BLANK SAMPLE ACCEPTANCE CRITERIA VIOLATION
H. KRAMER SITE
CHICAGO, ILLINOIS

Analyte	*Sample ID*	*Qualifier (mg/kg)*[1]
Beryllium	S-070705-JH-002	U(0.36)
	S-070705-JH-003	U(0.27)
	S-070705-JH-005	U(0.26)
	S-070705-JH-007	U(0.34)
	S-070705-JH-020	U(0.34)
	S-070705-JH-023	U(0.34)
	S-070705-JH-029	U(0.44)
	S-070705-JH-032	U(0.35)
	S-070705-JH-030	U(0.31)
	S-070705-JH-033	U(0.19)
	S-070705-JH-038	U(0.48)
	S-070705-JH-045	U(0.26)
	S-070705-JH-048	U(0.27)
	S-070805-JH-051	U(0.44)
	S-070805-JH-062	U(0.39)
	S-070805-JH-063	U(0.26)
	S-070705-JH-025	U(0.30)
	S-070705-JH-026	U(0.35)
Copper	S-070705-JH-033	U(5.7)
Thallium	S-070805-JH-051	U(0.59)
	S-070805-JH-054	U(0.63)
	S-070805-JH-061	U(0.70)
	S-070805-JH-067	U(0.54)
	S-070805-JH-071	U(0.67)
	S-070805-JH-074	U(0.60)

[1] The sample results should be qualified as:
U() - The analyte was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

CRA 09526M-3-T4

TABLE 5

QUALIFICATION OF SAMPLE DATA AS A RESULT OF MS/MSD SAMPLE ACCEPTANCE CRITERIA VIOLATION
H. KRAMER SITE
CHICAGO, ILLINOIS

Analyte	*Sample ID*	*Qualifier*[1]
Antimony	S-070705-JH-002	UJ
	S-070705-JH-001	J
	S-070705-JH-003	J
	S-070705-JH-005	UJ
	S-070705-JH-004	J
	S-070705-JH-006	J
	S-070705-JH-007	J
	S-070705-JH-008	UJ
	S-070705-JH-010	UJ
	S-070705-JH-009	J
	S-070705-JH-015	J
	S-070705-JH-013	J
	S-070705-JH-016	J
	S-070705-JH-014	J
	S-070705-JH-012	J
	S-070705-JH-011	J
	S-070705-JH-018	J
	S-070705-JH-019	J
	S-070705-JH-020	UJ
	S-070705-JH-023	UJ
	S-070705-JH-022	J
	S-070705-JH-021	J
	S-070705-JH-027	J
	S-070705-JH-028	J
	S-070705-JH-029	UJ
	S-070705-JH-030	UJ
	S-070705-JH-032	UJ
	S-070705-JH-031	J
	S-070705-JH-033	J
	S-070705-JH-034	UJ
	S-070705-JH-035	UJ

TABLE 5

QUALIFICATION OF SAMPLE DATA AS A RESULT OF
MS/MSD SAMPLE ACCEPTANCE CRITERIA VIOLATION
H. KRAMER SITE
CHICAGO, ILLINOIS

Analyte	*Sample ID*	*Qualifier*[1]
Antimony	S-070705-JH-036	J
	S-070705-JH-038	UJ
	S-070705-JH-037	UJ
	S-070705-JH-042	UJ
	S-070705-JH-041	J
	S-070705-JH-040	J
	S-070705-JH-044	J
	S-070705-JH-043	J
	S-070705-JH-045	UJ
	S-070705-JH-048	UJ
	S-070705-JH-046	J
	S-070705-JH-047	J
	S-070705-JH-049	UJ
	S-070705-JH-050	J
	S-070805-JH-073	J
	S-070805-JH-074	J
	S-070805-JH-075	UJ
	S-070805-JH-076	J
	S-070805-JH-077	UJ
	S-070805-JH-078	J
	S-070705-JH-024	J
	S-070705-JH-025	J
	S-070705-JH-026	UJ
Cadmium	S-070705-JH-002	J
	S-070705-JH-001	J
	S-070705-JH-003	J
	S-070705-JH-004	J
	S-070705-JH-005	J
	S-070705-JH-008	J
	S-070705-JH-006	J

TABLE 5

QUALIFICATION OF SAMPLE DATA AS A RESULT OF
MS/MSD SAMPLE ACCEPTANCE CRITERIA VIOLATION
H. KRAMER SITE
CHICAGO, ILLINOIS

Analyte	*Sample ID*	*Qualifier*[1]
Cadmium	S-070705-JH-007	J
	S-070705-JH-009	J
	S-070705-JH-010	J
	S-070705-JH-016	J
	S-070705-JH-015	J
	S-070705-JH-013	J
	S-070705-JH-014	J
	S-070705-JH-011	J
	S-070705-JH-012	J
	S-070705-JH-019	J
	S-070705-JH-020	J
	S-070705-JH-018	J
	S-070705-JH-022	J
	S-070705-JH-023	J
	S-070705-JH-021	J
	S-070705-JH-029	J
	S-070705-JH-027	J
	S-070705-JH-028	J
	S-070705-JH-030	J
	S-070705-JH-031	J
	S-070705-JH-032	J
	S-070705-JH-034	J
	S-070705-JH-033	J
	S-070705-JH-038	J
	S-070705-JH-036	J
	S-070705-JH-037	J
	S-070705-JH-035	J
	S-070705-JH-040	J
	S-070705-JH-041	J
	S-070705-JH-044	J
	S-070705-JH-025	J

TABLE 5

QUALIFICATION OF SAMPLE DATA AS A RESULT OF
MS/MSD SAMPLE ACCEPTANCE CRITERIA VIOLATION
H. KRAMER SITE
CHICAGO, ILLINOIS

Analyte	*Sample ID*	*Qualifier*[1]
Cadmium	S-070705-JH-026	J
	S-070705-JH-024	J
Copper	S-070705-JH-002	J
	S-070705-JH-001	J
	S-070705-JH-003	J
	S-070705-JH-004	J
	S-070705-JH-005	J
	S-070705-JH-008	J
	S-070705-JH-007	J
	S-070705-JH-006	J
	S-070705-JH-010	J
	S-070705-JH-009	J
	S-070705-JH-015	J
	S-070705-JH-013	J
	S-070705-JH-016	J
	S-070705-JH-014	J
	S-070705-JH-012	J
	S-070705-JH-011	J
	S-070705-JH-019	J
	S-070705-JH-018	J
	S-070705-JH-020	J
	S-070705-JH-021	J
Lead	S-070705-JH-001	J
	S-070705-JH-002	J
	S-070705-JH-003	J
	S-070705-JH-005	J
	S-070705-JH-004	J
	S-070705-JH-006	J
	S-070705-JH-007	J

TABLE 5

QUALIFICATION OF SAMPLE DATA AS A RESULT OF MS/MSD SAMPLE ACCEPTANCE CRITERIA VIOLATION
H. KRAMER SITE
CHICAGO, ILLINOIS

Analyte	*Sample ID*	*Qualifier*[1]
Lead	S-070705-JH-008	J
	S-070705-JH-009	J
	S-070705-JH-010	J
	S-070705-JH-015	J
	S-070705-JH-014	J
	S-070705-JH-016	J
	S-070705-JH-013	J
	S-070705-JH-012	J
	S-070705-JH-011	J
	S-070705-JH-019	J
	S-070705-JH-020	J
	S-070705-JH-018	J
	S-070705-JH-021	J
	S-070805-JH-051	J
	S-070805-JH-053	J
	S-070805-JH-052	J
	S-070805-JH-054	J
	S-070805-JH-055	J
	S-070805-JH-056	J
	S-070805-JH-057	J
	S-070805-JH-059	J
	S-070805-JH-060	J
	S-070805-JH-061	J
	S-070805-JH-062	J
	S-070805-JH-063	J
	S-070805-JH-064	J
	S-070805-JH-065	J
	S-070805-JH-066	J
	S-070805-JH-067	J
	S-070805-JH-068	J
	S-070805-JH-070	J

TABLE 5

QUALIFICATION OF SAMPLE DATA AS A RESULT OF
MS/MSD SAMPLE ACCEPTANCE CRITERIA VIOLATION
H. KRAMER SITE
CHICAGO, ILLINOIS

Analyte	*Sample ID*	*Qualifier*[1]
Lead	S-070805-JH-071	J
	S-070805-JH-072	J
Mercury	S-070705-JH-001	J
	S-070705-JH-004	J
	S-070705-JH-003	J
	S-070705-JH-006	J
	S-070705-JH-007	J
	S-070705-JH-010	J
	S-070705-JH-009	J
	S-070705-JH-014	J
	S-070705-JH-015	J
	S-070705-JH-013	J
	S-070705-JH-012	J
	S-070705-JH-011	J
	S-070705-JH-019	J
	S-070705-JH-018	J
	S-070705-JH-021	J
	S-070705-JH-042	UJ
	S-070705-JH-045	UJ
	S-070705-JH-043	UJ
	S-070705-JH-047	J
	S-070705-JH-046	J
	S-070705-JH-048	UJ
	S-070705-JH-049	J
	S-070705-JH-050	J
	S-070805-JH-073	J
	S-070805-JH-074	J
	S-070805-JH-075	J
	S-070805-JH-076	J
	S-070805-JH-077	UJ

TABLE 5

QUALIFICATION OF SAMPLE DATA AS A RESULT OF MS/MSD SAMPLE ACCEPTANCE CRITERIA VIOLATION
H. KRAMER SITE
CHICAGO, ILLINOIS

Analyte	*Sample ID*	*Qualifier* [1]
Mercury	S-070805-JH-078	J

[1] The sample results should be qualified as:
UJ - The material was analyzed for, but was not detected. The associated value is an estimate and may be inaccurate or imprecise.
J - The associated value is an estimated quantity.

TABLE 6

QUALIFICATION OF SAMPLE DATA AS A RESULT OF
SERIAL DILUTION ACCEPTANCE CRITERIA VIOLATION
H. KRAMER SITE
CHICAGO, ILLINOIS

Analyte	*Sample ID*	*Qualifier* [1]
Beryllium	S-070705-JH-044	J
	S-070805-JH-072	J
Chromium	S-070705-JH-020	J
Nickel	S-070705-JH-020	J
Zinc	S-070705-JH-020	J

[1] The sample results should be qualified as:
J - The associated value is an estimated quantity.

CRA 039626M-3-T6

TABLE 7

QUALIFICATION OF SAMPLE DATA AS A RESULT OF
FIELD BLANK SAMPLE ACCEPTANCE CRITERIA VIOLATION
H. KRAMER SITE
CHICAGO, ILLINOIS

Analyte	*Sample ID*	*Qualifier (mg/kg)* [1]
Thallium	S-070805-JH-051	U(0.59)
	S-070805-JH-054	U(0.63)
	S-070805-JH-061	U(0.70)
	S-070805-JH-067	U(0.54)
	S-070805-JH-071	U(0.67)
	S-070805-JH-074	U(0.60)

[1] The sample results should be qualified as:
U() - The analyte was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

CRA 09826M-3-T7

TABLE 8

SUMMARY OF DETECTED ANALYTES
FIELD DUPLICATE SAMPLE SETS
H. KRAMER SITE
CHICAGO, ILLINOIS

Analyte	*Investigative Sample S-070805-JH-052 (mg/kg)*	*Duplicate Sample S-070805-JH-053 (mg/kg)*	*RPD*[1]
Mercury	0.13	0.14	7.4
Chromium	14.6	13.7	6.4
Nickel	20.9	17.0	21
Beryllium	2.1	2.0	4.9
Cadmium	2.7	2.4	12
Lead	132	135	2.2
Copper	141	140	0.71
Arsenic	5.2	5.7	9.2
Zinc	559	536	4.2
Antimony	0.97B[2]	1.0B	3.0

Analyte	*Investigative Sample S-070805-JH-067 (mg/kg)*	*Duplicate Sample S-070805-JH-068 (mg/kg)*	*RPD*
Beryllium	1.7	0.75	78
Antimony	1.0B	1.7B	52
Zinc	488	415	16
Copper	133	120	10
Cadmium	2.7	2.8	3.6
Lead	288	247	15
Arsenic	30.7	19.3	46
Nickel	18.7	13.6	32
Mercury	1.2	0.81	39
Chromium	33.0	28.7	14
Silver	ND(1.0)[3]	0.32B	NC[4]

TABLE 8

SUMMARY OF DETECTED ANALYTES
FIELD DUPLICATE SAMPLE SETS
H. KRAMER SITE
CHICAGO, ILLINOIS

Analyte	*Investigative Sample S-070705-JH-013 (mg/kg)*	*Duplicate Sample S-070705-JH-014 (mg/kg)*	*RPD*
Copper	10200	7090	36
Arsenic	66.6	211	100
Antimony	473	2330	130
Zinc	4470	6140	31
Nickel	114	191	50
Chromium	80.9	102	23
Beryllium	0.97	1.2	21
Lead	6530	22800	110
Silver	34.0	37.2	9.0
Mercury	1.9	2.4	23
Cadmium	27.9	27.9	0

Analyte	*Investigative Sample S-070705-JH-035 (mg/kg)*	*Duplicate Sample S-070705-JH-036 (mg/kg)*	*RPD*
Lead	394	319	21
Beryllium	1.2	0.95	23
Mercury	0.13	0.62	130
Arsenic	2.7	3.2	17
Chromium	33.0	18.3	57
Silver	0.64B	0.52B	21
Zinc	3270	1180	94
Nickel	28.8	15.8	58
Selenium	2.5	2.5	0
Copper	5010	1610	100
Cadmium	2.8	2.0	33
Antimony	ND(6.3)	0.54B	NC

[1] RPD - Relative Percent Difference

[2] B - Analyte concentration between method detection limit and reporting limit

[3] ND( ) - Not detected at the quantitation limit listed in parentheses.

NC - Not calculable

CRA 09526M-3-T8

TABLE 9

QUALIFICATION OF SAMPLE DATA AS A RESULT OF
FIELD DUPLICATE ACCEPTANCE CRITERIA VIOLATION
H. KRAMER SITE
CHICAGO, ILLINOIS

Analyte	*Sample ID*	*Qualifier*[1]
Nickel	S-070705-JH-013	J
	S-070705-JH-014	J
Chromium	S-070705-JH-035	J
	S-070705-JH-036	J
Zinc	S-070705-JH-035	J
	S-070705-JH-036	J
Copper	S-070705-JH-035	J
	S-070705-JH-036	J

[1] The sample results should be qualified as:
J - The associated value is an estimated quantity.

APPENDIX M

STL ANALYTICAL REPORT - PHASE 3

039826 (6)

SEVERN TRENT STL

STL North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

Tel: 330 497 9396 Fax: 330 497 0772
www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. 39826

H. KRAMER

Lot #: A6A110177

Dave Hendren

Conestoga-Rovers & Associates
8615 W. Bryn Mawr
Chicago, IL 60631

SEVERN TRENT LABORATORIES, INC.

Amy L. McCormick
Project Manager

January 25, 2006

CASE NARRATIVE
A6A110177

The following report contains the analytical results for ten solid samples and one water sample submitted to STL North Canton by Conestoga-Rovers & Associates, Inc. from the H. Kramer Site, project number 39826. The samples were received January 11, 2006, according to documented sample acceptance procedures.

STL utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Dave Hendren on January 20, 2006. A summary of QC data for these analyses is included at the back of the report.

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

All solid sample results are reported on an "as received" basis unless otherwise indicated by a dry weight adjustment footnote at the bottom of the analytical report page. The list of parameters which are never reported on a dry weight basis is included on the Sample Summary.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Amy L. McCormick, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT." The total number of pages in this report is 60.

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperature of the cooler upon sample receipt was 4.6°C.

CASE NARRATIVE (continued)

METALS

Matrix spike recovery and relative percent difference (RPD) data were not calculated for some analytes for S-011006-WP-079 due to the sample concentration reading greater than four times the spike amount. See the Matrix Spike Report for the affected analytes which will be flagged with "NC, MSB".

The matrix spike/matrix spike duplicate(s) for batch 6012018 had RPD's and recoveries outside acceptance limits. However, since the associated method blank(s) and laboratory control sample(s) were in control, no corrective action was necessary.

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. STL North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples. These QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. The only exception is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed below.)

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals
Methylene chloride	Phthalate Esters	Copper
Acetone		Iron
2-Butanone		Zinc
		Lead*

- *for analyses run on TJA Trace ICP, ICPMS or GFAA only*

QUALITY CONTROL ELEMENTS OF SW-846 METHODS
(Continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepped and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepped and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide, PCB, and PAH methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria.

STL North Canton Certifications and Approvals:

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225), Illinois (#200004), Kansas (#E10336), Massachusetts (#M-OH048), Maryland (#272), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), North Carolina (#39702), Ohio (#6090), OhioVAP (#CL0024), Rhode Island (#237), South Carolina (#92007001, #92007002, #92007003), Tennessee (#02903), Utah (#QUAN9), Virginia (#00011), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit, ACIL Seal of Excellence – Participating Lab Status Award (#82)

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EXECUTIVE SUMMARY - Detection Highlights

A6A110177

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-011006-WP-079 01/10/06 08:40 001				
Lead	342	0.35	mg/kg	SW846 6010B
Percent Solids	85.7	10.0	%	MCAWW 160.3 MOD
S-011006-WP-080 01/10/06 08:50 002				
Lead	395	0.36	mg/kg	SW846 6010B
Percent Solids	82.5	10.0	%	MCAWW 160.3 MOD
S-011006-WP-082 01/10/06 09:05 004				
Lead	248	0.35	mg/kg	SW846 6010B
Percent Solids	85.7	10.0	%	MCAWW 160.3 MOD
S-011006-WP-083 01/10/06 09:10 005				
Lead	215	0.36	mg/kg	SW846 6010B
Percent Solids	84.1	10.0	%	MCAWW 160.3 MOD
S-011006-WP-084 01/10/06 09:25 006				
Lead - TCLP	0.53	0.50	mg/L	SW846 6010B
Lead	143	0.33	mg/kg	SW846 6010B
Percent Solids	91.6	10.0	%	MCAWW 160.3 MOD
S-011006-WP-085 01/10/06 09:30 007				
Lead - TCLP	0.74	0.50	mg/L	SW846 6010B
Lead	378	0.37	mg/kg	SW846 6010B
Percent Solids	80.0	10.0	%	MCAWW 160.3 MOD
S-011006-WP-086 01/10/06 09:35 008				
Lead	18.5	0.36	mg/kg	SW846 6010B
Percent Solids	82.5	10.0	%	MCAWW 160.3 MOD
S-011006-WP-087 01/10/06 09:47 009				
Lead - TCLP	181	25.0	mg/L	SW846 6010B
Lead	8590	6.2	mg/kg	SW846 6010B
Percent Solids	96.3	10.0	%	MCAWW 160.3 MOD

(Continued on next page)

EXECUTIVE SUMMARY - Detection Highlights

A6A110177

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-011006-WP-088 01/10/06 09:55 010				
Lead - TCLP	1.8	0.50	mg/L	SW846 6010B
Lead	2140	1.7	mg/kg	SW846 6010B
Percent Solids	87.7	10.0	%	MCAWW 160.3 MOD
S-011006-WP-089 01/10/06 10:00 011				
Lead - TCLP	1.5	0.50	mg/L	SW846 6010B
Lead	3790	6.9	mg/kg	SW846 6010B
Percent Solids	87.2	10.0	%	MCAWW 160.3 MOD

ANALYTICAL METHODS SUMMARY

A6A110177

PARAMETER	ANALYTICAL METHOD
Inductively Coupled Plasma (ICP) Metals	SW846 6010B
Total Residue as Percent Solids	MCAWW 160.3 MOD
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A6A110177

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
HVFLD	001	S-011006-WP-079	01/10/06	08:40
HVFLL	002	S-011006-WP-080	01/10/06	08:50
HVFLP	003	GW-011006-WP-081	01/10/06	08:55
HVFLR	004	S-011006-WP-082	01/10/06	09:05
HVFLT	005	S-011006-WP-083	01/10/06	09:10
HVFLV	006	S-011006-WP-084	01/10/06	09:25
HVFLW	007	S-011006-WP-085	01/10/06	09:30
HVFLX	008	S-011006-WP-086	01/10/06	09:35
HVFL1	009	S-011006-WP-087	01/10/06	09:47
HVFL2	010	S-011006-WP-088	01/10/06	09:55
HVFL3	011	S-011006-WP-089	01/10/06	10:00

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-079

TOTAL Metals

Lot-Sample #...: A6A110177-001 Matrix.....: SO
Date Sampled...: 01/10/06 08:40 Date Received..: 01/11/06
% Moisture.....: 14

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6012018						
Lead	342	0.35	mg/kg	SW846 6010B	01/12-01/13/06	HVFLD1AA
		Dilution Factor: 1				

NOTE(S):
Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-079

TCLP Metals

Lot-Sample #...: A6A110177-001 Matrix.....: SO
Date Sampled...: 01/10/06 08:40 Date Received..: 01/11/06
Leach Date.....: 01/12/06 Leach Batch #..: P601205

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6013035						
Lead	ND	0.50	mg/L	SW846 6010B	01/13/06	HVFLD1AD
		Dilution Factor: 1				

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-079

General Chemistry

Lot-Sample #...: A6A110177-001 Work Order #...: HVFLD Matrix.....: SO
Date Sampled...: 01/10/06 08:40 Date Received..: 01/11/06
% Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	85.7	10.0	%	MCAWW 160.3 MOD	01/12-01/13/06	6012127

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-080

TOTAL Metals

Lot-Sample #...: A6A110177-002 Matrix.....: SO
Date Sampled...: 01/10/06 08:50 Date Received..: 01/11/06
% Moisture.....: 18

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6012018						
Lead	395	0.36	mg/kg	SW846 6010B	01/12-01/13/06	HVFLL1AA
		Dilution Factor: 1				

NOTE(S):
Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-080

TCLP Metals

Lot-Sample #...: A6A110177-002 Matrix.....: SO
Date Sampled...: 01/10/06 08:50 Date Received..: 01/11/06
Leach Date.....: 01/12/06 Leach Batch #..: P601205

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6013035						
Lead	ND	0.50	mg/L	SW846 6010B	01/13/06	HVFLL1AD
		Dilution Factor: 1				

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-080

General Chemistry

Lot-Sample #...: A6A110177-002 Work Order #...: HVFLL Matrix.....: SO
Date Sampled...: 01/10/06 08:50 Date Received..: 01/11/06
% Moisture.....: 18

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	82.5	10.0	%	MCAWW 160.3 MOD	01/12-01/13/06	6012127

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-011006-WP-081

TOTAL Metals

Lot-Sample #...: A6A110177-003 Matrix.....: WG
Date Sampled...: 01/10/06 08:55 Date Received..: 01/11/06

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6012012						
Lead	ND	0.0030	mg/L	SW846 6010B	01/12/06	HVFLP1AA
		Dilution Factor: 1				

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-082

TOTAL Metals

Lot-Sample #...: A6A110177-004 Matrix.....: SO
Date Sampled...: 01/10/06 09:05 Date Received..: 01/11/06
% Moisture.....: 14

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6012018						
Lead	248	0.35	mg/kg	SW846 6010B	01/12-01/13/06	HVFLR1AA
		Dilution Factor: 1				

NOTE(S):
Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-082

TCLP Metals

Lot-Sample #...: A6A110177-004 Matrix.....: SO
Date Sampled...: 01/10/06 09:05 Date Received..: 01/11/06
Leach Date.....: 01/12/06 Leach Batch #..: P601205

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6013035						
Lead	ND	0.50	mg/L	SW846 6010B	01/13/06	HVFLR1AD
		Dilution Factor: 1				

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-082

General Chemistry

Lot-Sample #...: A6A110177-004 Work Order #...: HVFLR Matrix.....: SO
Date Sampled...: 01/10/06 09:05 Date Received..: 01/11/06
% Moisture.....: 14

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	85.7	10.0	%	MCAWW 160.3 MOD	01/12-01/13/06	6012127

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-083

TOTAL Metals

Lot-Sample #...: A6A110177-005 Matrix.....: SO
Date Sampled...: 01/10/06 09:10 Date Received..: 01/11/06
% Moisture.....: 16

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6012018						
Lead	215	0.36	mg/kg	SW846 6010B	01/12-01/13/06	HVFLT1AA
		Dilution Factor: 1				

NOTE(S):
Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-083

TCLP Metals

Lot-Sample #...: A6A110177-005 Matrix.....: SO
Date Sampled...: 01/10/06 09:10 Date Received..: 01/11/06
Leach Date.....: 01/12/06 Leach Batch #..: P601205

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6013035						
Lead	ND	0.50	mg/L	SW846 6010B	01/13/06	HVFLT1AD
		Dilution Factor: 1				

NOTE(S):
Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-083

General Chemistry

Lot-Sample #...: A6A110177-005 Work Order #...: HVFLT Matrix.....: SO
Date Sampled...: 01/10/06 09:10 Date Received..: 01/11/06
% Moisture.....: 16

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	84.1	10.0	%	MCAWW 160.3 MOD	01/12-01/13/06	6012127

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-084

TOTAL Metals

Lot-Sample #...: A6A110177-006 Matrix.....: SO
Date Sampled...: 01/10/06 09:25 Date Received..: 01/11/06
% Moisture.....: 8.4

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6012018						
Lead	143	0.33	mg/kg	SW846 6010B	01/12-01/13/06	HVFLV1AA
		Dilution Factor: 1				

NOTE(S):
Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-084

TCLP Metals

Lot-Sample #...: A6A110177-006 Matrix.....: SO
Date Sampled...: 01/10/06 09:25 Date Received..: 01/11/06
Leach Date.....: 01/12/06 Leach Batch #..: P601205

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6013035						
Lead	0.53	0.50	mg/L	SW846 6010B	01/13/06	HVFLV1AD
		Dilution Factor: 1				

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-084

General Chemistry

Lot-Sample #...: A6A110177-006 Work Order #...: HVFLV Matrix.....: SO
Date Sampled...: 01/10/06 09:25 Date Received..: 01/11/06
% Moisture.....: 8.4

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	91.6	10.0	%	MCAWW 160.3 MOD	01/12-01/13/06	6012127

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-085

TOTAL Metals

Lot-Sample #...: A6A110177-007 Matrix.....: SO
Date Sampled...: 01/10/06 09:30 Date Received..: 01/11/06
% Moisture.....: 20

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6012018						
Lead	378	0.37	mg/kg	SW846 6010B	01/12-01/13/06	HVFLW1AA
		Dilution Factor: 1				

NOTE(S):
Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-085

TCLP Metals

Lot-Sample #...: A6A110177-007 Matrix.....: SO
Date Sampled...: 01/10/06 09:30 Date Received..: 01/11/06
Leach Date.....: 01/12/06 Leach Batch #..: P601205

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6013035						
Lead	0.74	0.50	mg/L	SW846 6010B	01/13/06	HVFLW1AD
		Dilution Factor: 1				

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-085

General Chemistry

Lot-Sample #...: A6A110177-007 Work Order #...: HVFLW Matrix.....: SO
Date Sampled...: 01/10/06 09:30 Date Received..: 01/11/06
% Moisture.....: 20

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	80.0	10.0	%	MCAWW 160.3 MOD	01/12-01/13/06	6012127

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-086

TOTAL Metals

Lot-Sample #...: A6A110177-008 Matrix.....: SO
Date Sampled...: 01/10/06 09:35 Date Received..: 01/11/06
% Moisture.....: 17

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6012018						
Lead	18.5	0.36	mg/kg	SW846 6010B	01/12-01/13/06	HVFLX1AA
		Dilution Factor: 1				

NOTE(S):
Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-086

TCLP Metals

Lot-Sample #...: A6A110177-008 Matrix.....: SO
Date Sampled...: 01/10/06 09:35 Date Received..: 01/11/06
Leach Date.....: 01/12/06 Leach Batch #..: P601205

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6013035						
Lead	ND	0.50	mg/L	SW846 6010B	01/13/06	HVFLX1AD
		Dilution Factor: 1				

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-086

General Chemistry

Lot-Sample #...: A6A110177-008 Work Order #...: HVFLX Matrix.....: SO
Date Sampled...: 01/10/06 09:35 Date Received..: 01/11/06
% Moisture.....: 17

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	82.5	10.0	%	MCAWW 160.3 MOD	01/12-01/13/06	6012127

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-087

TOTAL Metals

Lot-Sample #...: A6A110177-009 Matrix.....: SO
Date Sampled...: 01/10/06 09:47 Date Received..: 01/11/06
% Moisture.....: 3.7

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6012018						
Lead	8590	6.2	mg/kg	SW846 6010B	01/12-01/13/06	HVFL11AA
		Dilution Factor: 20				

NOTE(S):
Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-087

TCLP Metals

Lot-Sample #...: A6A110177-009 Matrix.....: SO
Date Sampled...: 01/10/06 09:47 Date Received..: 01/11/06
Leach Date.....: 01/12/06 Leach Batch #..: P601205

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6013035						
Lead	181	25.0	mg/L	SW846 6010B	01/13-01/16/06	HVFL11AD
		Dilution Factor: 50				

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-087

General Chemistry

Lot-Sample #...: A6A110177-009 Work Order #...: HVFL1 Matrix.....: SO
Date Sampled...: 01/10/06 09:47 Date Received..: 01/11/06
% Moisture.....: 3.7

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	96.3	10.0	%	MCAWW 160.3 MOD	01/12-01/13/06	6012127

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-088

TOTAL Metals

Lot-Sample #...: A6A110177-010 Matrix.....: SO
Date Sampled...: 01/10/06 09:55 Date Received..: 01/11/06
% Moisture.....: 12

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6012018						
Lead	2140	1.7	mg/kg	SW846 6010B	01/12-01/13/06	HVFL21AA
		Dilution Factor: 5				

NOTE(S):

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-088

TCLP Metals

Lot-Sample #...: A6A110177-010 Matrix.....: SO
Date Sampled...: 01/10/06 09:55 Date Received..: 01/11/06
Leach Date.....: 01/12/06 Leach Batch #..: P601205

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6013035						
Lead	1.8	0.50	mg/L	SW846 6010B	01/13/06	HVFL21AD
		Dilution Factor: 1				

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-088

General Chemistry

Lot-Sample #...: A6A110177-010 Work Order #...: HVFL2 Matrix.....: SO
Date Sampled...: 01/10/06 09:55 Date Received..: 01/11/06
% Moisture.....: 12

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	87.7	10.0	%	MCAWW 160.3 MOD	01/12-01/13/06	6012127

Dilution Factor: 1

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-089

TOTAL Metals

Lot-Sample #...: A6A110177-011 Matrix.....: SO
Date Sampled...: 01/10/06 10:00 Date Received..: 01/11/06
% Moisture.....: 13

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6012018						
Lead	3790	6.9	mg/kg	SW846 6010B	01/12-01/13/06	HVFL31AA
		Dilution Factor: 20				

NOTE(S):
Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-089

TCLP Metals

Lot-Sample #...: A6A110177-011 Matrix.....: SO
Date Sampled...: 01/10/06 10:00 Date Received..: 01/11/06
Leach Date.....: 01/12/06 Leach Batch #..: P601205

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 6013035						
Lead	1.5	0.50	mg/L	SW846 6010B	01/13/06	HVFL31AD
		Dilution Factor: 1				

NOTE(S):

Analysis performed in accordance with USEPA Toxicity Characteristic Leaching Procedure Method 1311

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-011006-WP-089

General Chemistry

Lot-Sample #...: A6A110177-011 Work Order #...: HVFL3 Matrix.....: SO
Date Sampled...: 01/10/06 10:00 Date Received..: 01/11/06
% Moisture.....: 13

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids	87.2	10.0	%	MCAWW 160.3 MOD	01/12-01/13/06	6012127

Dilution Factor: 1

SEVERN TRENT STL

QUALITY CONTROL SECTION

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A6A110177 Matrix.....: WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A6A120000-012 Prep Batch #...: 6012012						
Lead	ND	0.0030	mg/L	SW846 6010B	01/12/06	HVG7N1A6
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A6A110177 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A6A120000-018 Prep Batch #...: 6012018						
Lead	ND	0.30	mg/kg	SW846 6010B	01/12-01/13/06	HVG741AC
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TCLP Metals

Client Lot #...: A6A110177 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A6A120000-254		Prep Batch #...: 6013035				
Leach Date.....: 01/12/06		Leach Batch #..: P601205				
Lead	ND	0.50	mg/L	SW846 6010B	01/13/06	HVH8K1AH
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

TCLP Metals

Client Lot #...: A6A110177 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A6A130000-035		Prep Batch #...: 6013035				
Lead	ND	0.50	mg/L	SW846 6010B	01/13/06	HVKKQ1AH
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A6A110177 Matrix.....: SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids		Work Order #:	HVHKE1AA	MB Lot-Sample #:	A6A120000-127	
	ND	10.0	%	MCAWW 160.3 MOD	01/12-01/13/06	6012127
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A6A110177 Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#:	A6A120000-012	Prep Batch #...: 6012012			
Lead	90	(80 - 120)	SW846 6010B	01/12/06	HVG7N1CN
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A6A110177 Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#:	A6A120000-018	Prep Batch #...: 6012018			
Lead	96	(80 - 120)	SW846 6010B	01/12-01/13/06	HVG741AR
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: A6A110177 Matrix.....: SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#:	A6A130000-035	Prep Batch #...: 6013035			
Lead	102	(50 - 150)	SW846 6010B	01/13/06	HVKKQ1AW
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A6A110177 Matrix.....: WATER
Date Sampled...: 01/10/06 07:11 Date Received..: 01/11/06

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A6A110260-001 Prep Batch #...: 6012012							
Lead	96	(75 - 125)			SW846 6010B	01/12/06	HVF831C9
	93	(75 - 125)	3.3	(0-20)	SW846 6010B	01/12/06	HVF831DA

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A6A110177 Matrix.....: SO
Date Sampled...: 01/10/06 08:40 Date Received..: 01/11/06

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A6A110177-001 Prep Batch #...: 6012018							
Lead	NC,MSB	(75 - 125)			SW846 6010B	01/12-01/13/06	HVFLD1AE
	NC,MSB	(75 - 125)		(0-20)	SW846 6010B	01/12-01/13/06	HVFLD1AF

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

NC The recovery and/or RPD were not calculated.

MSB The recovery and RPD were not calculated because the sample amount was greater than four times the spike amount.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A6A110177 Matrix.....: SOLID
Date Sampled...: 01/06/06 08:45 Date Received..: 01/11/06

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A6A110258-001 Prep Batch #...: 6012018							
						% Moisture.....: 9.0	
Lead	73 N	(75 - 125)			SW846 6010B	01/12-01/13/06	HVF731AU
	123 *	(75 - 125)	23	(0-20)	SW846 6010B	01/12-01/13/06	HVF731AV

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

N Spiked analyte recovery is outside stated control limits.

Results and reporting limits have been adjusted for dry weight.

* Relative percent difference (RPD) is outside stated control limits.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: A6A110177 **Matrix.....:** SO
Date Sampled...: 01/10/06 08:40 **Date Received..:** 01/11/06

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A6A110177-001 **Prep Batch #...:** 6013035							
Leach Date.....: 01/12/06 **Leach Batch #..:** P601205							
Lead	100	(50 - 150)			SW846 6010B	01/13/06	HVFLD1AJ
	102	(50 - 150)	2.6	(0-20)	SW846 6010B	01/13/06	HVFLD1AK

Dilution Factor: 5

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TCLP Metals

Client Lot #...: A6A110177 **Matrix.....:** SOLID
Date Sampled...: 01/11/06 09:05 **Date Received..:** 01/11/06

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A6A110245-001 **Prep Batch #...:** 6013035							
Leach Date.....: 01/12/06 **Leach Batch #..:** P601205							
Lead	102	(50 - 150)			SW846 6010B	01/13/06	HVF531CL
	107	(50 - 150)	5.1	(0-20)	SW846 6010B	01/13/06	HVF531CM

Dilution Factor: 5

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A6A110177 **Work Order #...:** HVFLD-SMP HVFLD-DUP **Matrix.....:** SO

Date Sampled...: 01/10/06 08:40 **Date Received..:** 01/11/06

% Moisture.....: 14

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #:	A6A110177-001	
	85.7	86.3	%	0.68	(0-20)	MCAWW 160.3 MOD	01/12-01/13/06	6012127

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A6A110177 Work Order #...: HVFR3-SMP Matrix.....: SOLID
HVFR3-DUP

Date Sampled...: 01/09/06 13:35 Date Received..: 01/11/06

% Moisture.....: 7.6

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #:	A6A110213-006	
	92.4	92.2	%	0.23	(0-20)	MCAWW 160.3 MOD	01/12-01/13/06	6012127

Dilution Factor: 1

CONESTOGA-ROVERS & ASSOCIATES
8615 W. Bryn Mawr Avenue
Chicago, Illinois 60631
(773)380-9933 phone
(773)380-6421 fax

SHIPPED TO (Laboratory Name): STL - North Canton

REFERENCE NUMBER: 39826

PROJECT NAME: H. Kramer

CHAIN-OF-CUSTODY RECORD

SAMPLER'S SIGNATURE: [signature] **PRINTED NAME:** Walter J. Pochron

SEQ. No.	DATE	TIME	SAMPLE IDENTIFICATION No.	SAMPLE MATRIX	No. OF CONTAINERS	PARAMETERS: Total Lead	PARAMETERS: TCLP Lead	REMARKS
	1/10/06	0840	S-011006-WP-079	Soil	1	X	X	MS/MSD
		0850	S-011006-WP-080	Soil	1	X	X	
		0855	S-011006-WP-081	Water	1	X		
		0905	S-011006-WP-082	Soil	1	X	X	
		0910	S-011006-WP-083	Soil	1	X	X	
		0925	S-011006-WP-084	Soil	1	X	X	
		0930	S-011006-WP-085	Soil	1	X	X	
		0935	S-011006-WP-086	Soil	1	X	X	
		0947	S-011006-WP-087	Soil	1	X	X	
		0955	S-011006-WP-088	Soil	1	X	X	
		10:00	S-011006-WP-089	Soil	1	X	X	
			TOTAL NUMBER OF CONTAINERS		11			

RELINQUISHED BY: ① [signature]	DATE: 1/10/06 TIME:	RECEIVED BY: ②	DATE: TIME:
RELINQUISHED BY: ②	DATE: TIME:	RECEIVED BY: ③	DATE: TIME:
RELINQUISHED BY: ③	DATE: TIME:	RECEIVED BY: ④	DATE: TIME:

METHOD OF SHIPMENT: Fed-Ex **AIR BILL No.**

White -Fully Executed Copy
Yellow -Receiving Laboratory Copy
Pink -Shipper Copy
Goldenrod -Sampler Copy

SAMPLE TEAM: W. Pochron

RECEIVED FOR LABORATORY BY: Lisa Hines 12652
DATE: 1-11-06 TIME: 9:25

1001 OURCE)GN-CO004

STL North Canton

HK 01678

STL Cooler Receipt Form/Narrative Lot Number: A6A110177
North Canton Facility 66072

Client: CRA Project: H Kramer Quote#: 45863
Cooler Received on: 1-11-06 Opened on: 1-11-06 by: [illegible] (Signature)
Fedx ☒ Client Drop Off ☐ UPS ☐ DHL ☐ FAS ☐ STL Courier ☐
Stetson ☐ US Cargo ☐ Other: _____
STL Cooler No# 1095 Foam Box ☐ Client Cooler ☐ Other _____

1. Were custody seals on the outside of the cooler? Yes ☐ No ☒ Intact? Yes ☐ No ☐ NA ☒
   If YES, Quantity _____
   Were the custody seals signed and dated? Yes ☐ No ☐ NA ☒
2. Shipper's packing slip attached to this form? Yes ☒ No ☐ NA ☐
3. Did custody papers accompany the samples? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Did you sign the custody papers in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other: Cardboard box
6. Cooler temperature upon receipt 4.6 °C (see back of form for multiple coolers/temp)

METHOD: Temp Vial ☐ Coolant & Sample ☐ Against Bottles ☐ IR ☒ ICE/H_2O Slurry ☐
COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐

7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels and/or tags be reconciled with the COC? Yes ☒ No ☐
9. Were samples at the correct pH? (record below/on back) Yes ☒ No ☐ NA ☐
10. Were correct bottles used for the tests indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☐ NA ☒
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a Trip Blank present in the cooler? Yes ☐ No ☒ Were VOAs on the COC? Yes ☐ No ☒
14. Does the trip blank number match the cooler number in which it was received? Yes ☐ No ☐ NA ☒

Contacted PM _____ Date: _____ by: _____ via Voice Mail ☐ Verbal ☐ Other ☐
Concerning: _____

√	
	1. CHAIN OF CUSTODY
	The following discrepancies occurred: _____
	2. SAMPLE CONDITION
	Sample(s) _____ were received after the recommended holding time had expired.
	Sample(s) _____ were received in a broken container.
	3. SAMPLE PRESERVATION
	Sample(s) _____ were further preserved in sample receiving to meet recommended pH level(s). *Nitric Acid Lot # 100405-HNO3; Sulfuric Acid Lot # 100405-H2SO4; Sodium Hydroxide Lot # -100405 -NaOH; Hydrochloric Acid Lot # 100504-HCl; Sodium Hydroxide and Zinc Acetate Lot # 071604-CH3COO2ZN/NaOH*
	Sample(s) _____ were received with bubble > 6 mm in diameter (cc: PM)
	4. Other (see below or back)

Client ID	pH	Date	Initials
WP-081	< 2	1-11-06	LH

STL Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler	Temp	Method	Coolant

Discrepancies Cont.

SOP: NC-SC-0005, Sample Receiving
\\ncmoh01\public\QAQC\NARRATIV\STL\Cooler Receipt STL\COOLER_STL_Rev 54 122005.doc 59

STL North Canton

HK 01680

SEVERN TRENT STL

END OF REPORT

APPENDIX N

DATA VALIDATION MEMORANDUM - PHASE 3

CONESTOGA-ROVERS & ASSOCIATES

8615 W. Bryn Mawr Avenue, Chicago, Illinois 60631
Telephone: (773) 380-9933 Fax: (773) 380-6421
www.CRAworld.com

MEMORANDUM

TO:	Walt Pochron	REF. NO.:	39826
FROM:	Dave Hendren/draft	DATE:	January 26, 2006
RE:	**Data Quality Assessment and Validation for Soil Samples Collected from H. Kramer in Chicago, Illinois.**		

The following details the data quality assessment and validation conducted for the 10 soil samples collected on January 10, 2006, from the H. Kramer property in Chicago, Illinois. The samples identified in Table 1 were analyzed for total lead and TCLP-lead, by Severn Trent Laboratories (STL) of North Canton, Ohio. The samples were analyzed using SW-846 Methods 1311 and 6010B from "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (SW-846, 3rd Edition). The quality assurance criteria used to assess the data were established by the method.[1]

Holding Time Period

The holding time period for analysis of lead is 180 days from sample collection to completion of analysis. All sample analyses were completed within the holding time period.

Method Blank Sample Data

Method blank sample data were evaluated to verify that analytes detected in the investigative samples were not attributable to laboratory conditions or procedures. There was no lead detected in the method blanks.

Laboratory Control Sample Analyses

Analytical accuracy and precision were evaluated by the percent recovery and relative percent difference (RPD) data from the analysis of duplicate laboratory control samples (also referred to as laboratory fortified blanks). The duplicate laboratory control sample percent recovery and RPD data were acceptable.

Matrix Spike/Matrix Spike Duplicate (MS/MSD) Sample Analyses

To assess the accuracy and precision of the analytical methods relative to the sample matrices, MS/MSD percent recoveries and RPDs were evaluated. The MS/MSD percent recovery and RPD data were acceptable or qualification was not required.

Application of quality assurance evaluation criteria was consistent with the relevant criteria in "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review", EPA-540/R-99/008, October 1999.

EQUAL EMPLOYMENT OPPORTUNITY EMPLOYER

REGISTERED COMPANY ISO 9001 ENGINEERING DESIGN

Field Quality Assurance/Quality Control (QA/QC)

The field QA/QC samples consisted of an equipment rinsate blank and a field duplicate sample set.

An equipment blank was analyzed to monitor the efficacy of the field decontamination procedures. No lead was detected in the equipment blank.

The overall precision of the sampling event and laboratory procedures was monitored using the results of the field duplicate sample set. Table 2 presents the RPDs of detected analytes in the duplicate sample set with qualifiers, if applicable. The data indicate that an adequate level of precision was achieved for the sampling event.

Overall Assessment

The data were found to exhibit acceptable levels of accuracy and precision and are suitable for their intended use, without qualifications.

Attachments

TABLE 1

SAMPLE IDENTIFICATION NUMBERS
H. KRAMER
CHICAGO, ILLINOIS

S-011006-WP-079
S-011006-WP-080
GW-011006-WP-081
S-011006-WP-082
S-011006-WP-083
S-011006-WP-084
S-011006-WP-085
S-011006-WP-086
S-011006-WP-087
S-011006-WP-088
S-011006-WP-089

TABLE 2

SUMMARY OF DETECTED ANALYTES FROM FIELD DUPLICATE SAMPLES
H. KRAMER
CHICAGO, ILLINOIS

Analyte	*Investigative Sample S-011006-WP-088*	*Duplicate Sample S-011006-WP-089*	*RPD* [1]	*Qualifier*
Total Lead	2140 mg/kg	3790 mg/kg	56 %	None
TCLP-Lead	1.8 mg/L	1.5 mg/L	30 %	None

[1] RPD - Relative Percent Difference

APPENDIX O

STL ANALYTICAL REPORT - PHASE 4

RECEIVED

JUN 21 2007

CRA INC.
CHICAGO

STL

STL North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

Tel: 330 497 9396 Fax: 330 497 0772
www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. 38926

H.KRAMER

Lot #: A7F080102

Dave Hendren

Conestoga-Rovers & Associates
8615 W. Bryn Mawr
Chicago, IL 60631

SEVERN TRENT LABORATORIES, INC.

Amy L. McCormick
Project Manager

June 20, 2007

CASE NARRATIVE

A7F080102

The following report contains the analytical results for one water sample submitted to STL North Canton by Conestoga-Rovers & Associates, Inc. from the H.Kramer Site, project number 38926. The sample was originally received June 02, 2007, according to documented sample acceptance procedures. Further analysis was requested by the client on June 06, 2007.

STL utilizes USEPA approved methods in all analytical work. The sample presented in this report was analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Dave Hendren on June 13, 2007. A summary of QC data for these analyses is included at the back of the report.

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

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Amy L. McCormick, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT." The total number of pages in this report is 13.

SUPPLEMENTAL QC INFORMATION

METALS

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. STL North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples. These QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. The only exception is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed below.)
-

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

QUALITY CONTROL ELEMENTS OF SW-846 METHODS
(Continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepped and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepped and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide, PCB, and PAH methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria.

STL North Canton Certifications and Approvals:

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225), Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Ohio (#6090), OhioVAP (#CL0024), Utah (#QUAN9), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit, ACIL Seal of Excellence – Participating Lab Status Award (#82)

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EXECUTIVE SUMMARY - Detection Highlights

A7F080102

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
GW-060107-WP-006 06/01/07 10:35 001				
Lead	0.017	0.0030	mg/L	SW846 6010B

ANALYTICAL METHODS SUMMARY

A7F080102

PARAMETER	ANALYTICAL METHOD
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A7F080102

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
J0J75	001	GW-060107-WP-006	06/01/07	10:35

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-060107-WP-006

TOTAL Metals

Lot-Sample #...: A7F080102-001 Matrix.....: WG
Date Sampled...: 06/01/07 10:35 Date Received..: 06/02/07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 7162027						
Lead	0.017	0.0030	mg/L	SW846 6010B	06/11/07	J0J751AA
		Dilution Factor: 1				

SEVERN TRENT STL

QUALITY CONTROL SECTION

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A7F080102 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A7F110000-027 **Prep Batch #...:** 7162027						
Lead	ND	0.0030	mg/L	SW846 6010B	06/11/07	J0N961CP
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A7F080102 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A7F110000-027 **Prep Batch #...:** 7162027					
Lead	86	(80 - 120)	SW846 6010B	06/11/07	J0N961C1
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A7F080102 **Matrix.....:** WATER
Date Sampled...: 06/07/07 16:00 **Date Received..:** 06/08/07

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A7F080333-001 **Prep Batch #...:** 7162027							
Lead	99	(75 - 125)			SW846 6010B	06/11/07	J0MCT1DP
	99	(75 - 125)	0.13	(0-20)	SW846 6010B	06/11/07	J0MCT1DQ

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

END OF REPORT

RECEIVED
JUN 12 2007
CRA INC.
CHICAGO

SEVERN TRENT STL

STL North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

Tel: 330 497 9396 Fax: 330 497 0772
www.stl-inc.com

ANALYTICAL REPORT

PROJECT NO. 39826

H. KRAMER

Lot #: A7F020139

Dave Hendren

Conestoga-Rovers & Associates
8615 W. Bryn Mawr
Chicago, IL 60631

SEVERN TRENT LABORATORIES, INC.

Amy L. McCormick
Project Manager

June 8, 2007

CASE NARRATIVE

A7F020139

The following report contains the analytical results for six water samples submitted to STL North Canton by Conestoga-Rovers & Associates, Inc. from the H. Kramer Site, project number 39826. The samples were received June 02, 2007, according to documented sample acceptance procedures.

STL utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Dave Hendren on June 05, 2007. A summary of QC data for these analyses is included at the back of the report.

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

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Amy L. McCormick, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT." The total number of pages in this report is 21.

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperature of the cooler upon sample receipt was 1.8°C.

METALS

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. STL North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples. These QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

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METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed below.)
-

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

QUALITY CONTROL ELEMENTS OF SW-846 METHODS
(Continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepped and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepped and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide, PCB, and PAH methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria.

EXECUTIVE SUMMARY - Detection Highlights

A7F020139

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
GW-060107-WP-006 06/01/07 10:35 002				
Lead	0.018	0.0030	mg/L	SW846 6010B
GW-060107-WP-009 06/01/07 12:59 005				
Lead	0.0030	0.0030	mg/L	SW846 6010B

ANALYTICAL METHODS SUMMARY

A7F020139

PARAMETER	ANALYTICAL METHOD
Trace Inductively Coupled Plasma (ICP) Metals	SW846 6010B

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A7F020139

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
JX6H5	001	GW-060107-WP-005	06/01/07	10:15
JX6JG	002	GW-060107-WP-006	06/01/07	10:35
JX6JL	003	GW-060107-WP-007	06/01/07	12:15
JX6JN	004	GW-060107-WP-008	06/01/07	12:25
JX6JR	005	GW-060107-WP-009	06/01/07	12:59
JX6J2	006	GW-060107-WP-010	06/01/07	15:10

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
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- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-060107-WP-005

TOTAL Metals

Lot-Sample #...: A7F020139-001 Matrix.....: WG
Date Sampled...: 06/01/07 10:15 Date Received..: 06/02/07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 7155015						
Lead	ND	0.0030	mg/L	SW846 6010B	06/04-06/05/07	JX6H51AA
		Dilution Factor: 1				

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-060107-WP-006

TOTAL Metals

Lot-Sample #...: A7F020139-002 Matrix.....: WG
Date Sampled...: 06/01/07 10:35 Date Received..: 06/02/07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 7155015						
Lead	0.018	0.0030	mg/L	SW846 6010B	06/04-06/05/07	JX6JG1AA
		Dilution Factor: 1				

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-060107-WP-007

TOTAL Metals

Lot-Sample #...: A7F020139-003 **Matrix.....:** WG
Date Sampled...: 06/01/07 12:15 **Date Received..:** 06/02/07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 7155015						
Lead	ND	0.0030	mg/L	SW846 6010B	06/04-06/05/07	JX6JL1AA
		Dilution Factor: 1				

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-060107-WP-008

TOTAL Metals

Lot-Sample #...: A7F020139-004 Matrix.....: WG
Date Sampled...: 06/01/07 12:25 Date Received..: 06/02/07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 7155015						
Lead	ND	0.0030	mg/L	SW846 6010B	06/04-06/05/07	JX6JN1AA
		Dilution Factor: 1				

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-060107-WP-009

TOTAL Metals

Lot-Sample #...: A7F020139-005 Matrix.....: WG
Date Sampled...: 06/01/07 12:59 Date Received..: 06/02/07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 7155015						
Lead	0.0030	0.0030	mg/L	SW846 6010B	06/04-06/05/07	JX6JR1AA
		Dilution Factor: 1				

Conestoga-Rovers & Associates, Inc.

Client Sample ID: GW-060107-WP-010

TOTAL Metals

Lot-Sample #...: A7F020139-006 Matrix.....: WG
Date Sampled...: 06/01/07 15:10 Date Received..: 06/02/07

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
Prep Batch #...: 7155015						
Lead	ND	0.0030	mg/L	SW846 6010B	06/04-06/05/07	JX6J21AA
		Dilution Factor: 1				

SEVERN TRENT STL

QUALITY CONTROL SECTION

METHOD BLANK REPORT

TOTAL Metals

Client Lot #...: A7F020139 **Matrix.....:** WATER

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MB Lot-Sample #: A7F040000-015 **Prep Batch #...:** 7155015						
Lead	ND	0.0030	mg/L	SW846 6010B	06/04-06/05/07	JX7F51AA
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A7F020139 **Matrix.....:** WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
LCS Lot-Sample#: A7F040000-015 **Prep Batch #...:** 7155015					
Lead	103	(80 - 120)	SW846 6010B	06/04-06/05/07	JX7F51AC
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

TOTAL Metals

Client Lot #...: A7F020139 **Matrix.....:** WG
Date Sampled...: 06/01/07 15:10 **Date Received..:** 06/02/07

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION-ANALYSIS DATE	WORK ORDER #
MS Lot-Sample #: A7F020139-006 **Prep Batch #...:** 7155015							
Lead	102	(75 - 125)			SW846 6010B	06/04-06/05/07	JX6J21AC
	104	(75 - 125)	2.2	(0-20)	SW846 6010B	06/04-06/05/07	JX6J21AD

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

CONESTOGA-ROVERS & ASSOCIATES
8615 W. Bryn Mawr Avenue
Chicago, Illinois 60631
(773)380-9933 phone
(773)380-6421 fax

SHIPPED TO (Laboratory Name): STL North Canton

REFERENCE NUMBER: 39826

PROJECT NAME: H. Kramer

CHAIN-OF-CUSTODY RECORD

SAMPLER'S SIGNATURE: [signature] PRINTED NAME: Walter Pochron

SEQ. No.	DATE	TIME	SAMPLE IDENTIFICATION No.	SAMPLE MATRIX	No. OF CONTAINERS	PARAMETERS: Total Lead	REMARKS
	6/1/07	10:15	GW-060107-WP-005	Water	1	X	
		10:35	GW-060107-WP-006		1	X	
		12:15	GW-060107-WP-007		1	X	
		12:25	GW-060107-WP-008		1	X	
		12:59	GW-060107-WP-009		1	X	
		15:10	GW-060107-WP-010		2	X	MS/MSD
			Temp Blank		1		
			TOTAL NUMBER OF CONTAINERS		8		

RELINQUISHED BY: ① [signature]	DATE: 6/1/07 TIME: 17:30	RECEIVED BY: ②	DATE: TIME:
RELINQUISHED BY: ②	DATE: TIME:	RECEIVED BY: ③	DATE: TIME:
RELINQUISHED BY: ②	DATE: TIME:	RECEIVED BY: ④	DATE: TIME:

METHOD OF SHIPMENT: Fed-X AIR BILL No.

White -Fully Executed Copy
Yellow -Receiving Laboratory Copy
Pink -Shipper Copy
Goldenrod -Sampler Copy

SAMPLE TEAM: W. Pochron

RECEIVED FOR LABORATORY BY: [signature]
DATE: 6-2-07 TIME: 0930

№ 2296

10)URCE)GN-CO004

STL North Canton

HK 01718

STL Cooler Receipt Form/Narrative **Lot Number:** A7F020139
North Canton Facility

Client: CRA Project: _____ Quote#: 65072
Cooler Received on: 6-2-07 Opened on: 6-2-07 by: [signature] (Signature)
Fedx ☒ Client Drop Off ☐ UPS ☐ DHL ☐ FAS ☐ STL Courier ☐
Stetson ☐ US Cargo ☐ Other: _____
STL Cooler No# No # Foam Box ☐ Client Cooler ☐ Other _____

1. Were custody seals on the outside of the cooler? Yes ☐ No ☒ Intact? Yes ☐ No ☐ NA ☒
   If YES, Quantity _____
   Were the custody seals signed and dated? Yes ☐ No ☐ NA ☒
2. Shipper's packing slip attached to this form? Yes ☒ No ☐ NA ☐
3. Did custody papers accompany the samples? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Did you sign the custody papers in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other: _____
6. Cooler temperature upon receipt 1.8 °C (see back of form for multiple coolers/temp)

METHOD: Temp Vial ☐ Coolant & Sample ☐ Against Bottles ☐ IR ☒ ICE/H_2O Slurry ☐
COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐

7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels and/or tags be reconciled with the COC? Yes ☒ No ☐
9. Were samples at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottles used for the tests indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☐ NA ☒
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a Trip Blank present in the cooler? Yes ☐ No ☒ Were VOAs on the COC? Yes ☐ No ☒

Contacted PM _____ Date: _____ by: _____ via Voice Mail ☐ Verbal ☐ Other ☐
Concerning:

√

1. CHAIN OF CUSTODY

The following discrepancies occurred:

2. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.

3. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in sample receiving to meet recommended pH level(s). *Nitric Acid Lot #110106 - Sulfuric Acid Lot # 092006-H2SO4; Sodium Hydroxide Lot # -122805 -NaOH; Hydrochloric Acid Lot # 100504-HCl; Sodium Hydroxide and Zinc Acetate Lot # 050205-CH3COO2ZN/NaOH*
Sample(s) _____ were received with bubble > 6 mm in diameter (cc: PM)

4. Other (see below or back)

Client ID	pH	Date	Initials
005	12	6-2-07	AS
006	12		
007	12		
008	12		

STL Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials
009	<2	6-2-07	NS
010	<2 <2	↓	↓

Cooler	Temp	Method	Coolant

Discrepancies Cont.

END OF REPORT

SEVERN TRENT STL

STL North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

Tel: 330 497 9396 Fax: 330 497 0772
www.stl-inc.com

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ANALYTICAL REPORT

PROJECT NO. 39826

H. KRAMER

Lot #: A7E240228

Dave Hendren

Conestoga-Rovers & Associates
8615 W. Bryn Mawr
Chicago, IL 60631

SEVERN TRENT LABORATORIES, INC.

Amy L. McCormick
Project Manager

June 8, 2007

CASE NARRATIVE

A7E240228

The following report contains the analytical results for two solid samples submitted to STL North Canton by Conestoga-Rovers & Associates, Inc. from the H. Kramer Site, project number 39826. The samples were received May 24, 2007, according to documented sample acceptance procedures.

STL utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for the parameter(s) listed on the analytical methods summary page in accordance with the method(s) indicated. Preliminary results were provided to Dave Hendren on June 05, 2007. A summary of QC data for these analyses is included at the back of the report.

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

All solid sample results are reported on an "as received" basis unless otherwise indicated by a dry weight adjustment footnote at the bottom of the analytical report page. The list of parameters which are never reported on a dry weight basis is included on the Sample Summary.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Amy L. McCormick, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT." The total number of pages in this report is 21.

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperature of the cooler upon sample receipt was 5.0°C.

CASE NARRATIVE (continued)

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. STL North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples. These QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. The only exception is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed below.)
-

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

QUALITY CONTROL ELEMENTS OF SW-846 METHODS
(Continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepped and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepped and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide, PCB, and PAH methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria.

STL North Canton Certifications and Approvals:

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225), Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Ohio (#6090), OhioVAP (#CL0024), Utah (#QUAN9), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit, ACIL Seal of Excellence – Participating Lab Status Award (#82)

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EXECUTIVE SUMMARY - Detection Highlights

A7E240228

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-052107-SP-03 05/21/07 09:15 001				
pH (solid)	7.9		No Units	SW846 9045C
Percent Solids	67.8	10.0	%	MCAWW 160.3 MOD
Total Organic Carbon	3800	150	mg/kg	MSA WALKLEY-BLACK
S-052107-SP-04 05/21/07 11:15 002				
pH (solid)	7.9		No Units	SW846 9045C
Percent Solids	83.5	10.0	%	MCAWW 160.3 MOD
Total Organic Carbon	3500	120	mg/kg	MSA WALKLEY-BLACK

ANALYTICAL METHODS SUMMARY

A7E240228

PARAMETER	ANALYTICAL METHOD
Soil and Waste pH	SW846 9045C
Total Organic Carbon	MSA WALKLEY-BLACK
Total Residue as Percent Solids	MCAWW 160.3 MOD

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

MSA "Methods of Soil Analysis, Chemical and Microbiological Properties", Part 2, 2nd Ed., 1982 and Subsequent Revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A7E240228

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
JXMNG	001	S-052107-SP-03	05/21/07	09:15
JXMNW	002	S-052107-SP-04	05/21/07	11:15

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-052107-SP-03

General Chemistry

Lot-Sample #...: A7E240228-001 Work Order #...: JXMNG Matrix.....: SO
Date Sampled...: 05/21/07 09:15 Date Received..: 05/24/07
% Moisture.....: 32

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	7.9		No Units	SW846 9045C	05/24/07	7144540
	Dilution Factor: 1					
Percent Solids	67.8	10.0	%	MCAWW 160.3 MOD	05/25-05/26/07	7145363
	Dilution Factor: 1					
Total Organic Carbon	3800	150	mg/kg	MSA WALKLEY-BLACK	06/05/07	7156306
	Dilution Factor: 1					

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-052107-SP-04

General Chemistry

Lot-Sample #...: A7E240228-002 Work Order #...: JXMNW Matrix.....: SO
Date Sampled...: 05/21/07 11:15 Date Received..: 05/24/07
% Moisture.....: 17

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	7.9		No Units	SW846 9045C	05/24/07	7144540
		Dilution Factor: 1				
Percent Solids	83.5	10.0	%	MCAWW 160.3 MOD	05/25-05/26/07	7145363
		Dilution Factor: 1				
Total Organic Carbon	3500	120	mg/kg	MSA WALKLEY-BLACK	06/05/07	7156306
		Dilution Factor: 1				

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

SEVERN TRENT STL

QUALITY CONTROL SECTION

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A7E240228 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids		Work Order #:	JXQ0A1AA	MB Lot-Sample #:	A7E250000-363	
	ND	10.0	%	MCAWW 160.3 MOD	05/25-05/26/07	7145363
		Dilution Factor: 1				
Total Organic Carbon		Work Order #:	J0AGH1AA	MB Lot-Sample #:	A7F050000-306	
	ND	100	mg/kg	MSA WALKLEY-BLACK	06/05/07	7156306
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A7E240228 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)		Work Order #: JXNJC1AA	LCS Lot-Sample#: A7E240000-540		
	101	(97 - 103)	SW846 9045C	05/24/07	7144540
		Dilution Factor: 1			
Total Organic Carbon		Work Order #: J0AGH1AC	LCS Lot-Sample#: A7F050000-306		
	109	(51 - 128)	MSA WALKLEY-BLACK	06/05/07	7156306
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A7E240228 **Work Order #...:** JXMNG-SMP JXMNG-DUP **Matrix.....:** SO

Date Sampled...: 05/21/07 09:15 **Date Received..:** 05/24/07

% Moisture.....: 32

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)						SD Lot-Sample #:	A7E240228-001	
	7.9	7.9	No Units	0.63	(0-20)	SW846 9045C	05/24/07	7144540

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A7E240228 **Work Order #...:** JXL12-SMP JXL12-DUP **Matrix.....:** SOLID

Date Sampled...: 05/23/07 14:00 **Date Received..:** 05/24/07

% Moisture.....: 7.4

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #:	A7E240184-007	
	92.6	92.0	%	0.61	(0-20)	MCAWW 160.3 MOD	05/25-05/26/07	7145363

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A7E240228 **Work Order #...:** JXMRE-SMP JXMRE-DUP **Matrix.....:** SOLID

Date Sampled...: 05/23/07 10:50 **Date Received..:** 05/24/07

% Moisture.....: 15

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #:	A7E240241-006	
	85.2	85.7	%	0.59	(0-20)	MCAWW 160.3 MOD	05/25-05/26/07	7145363

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A7E240228 **Work Order #...:** JXRKA-SMP JXRKA-DUP **Matrix.....:** SOLID

Date Sampled...: 05/23/07 12:00 **Date Received..:** 05/25/07

% Moisture.....: 12

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon						SD Lot-Sample #: A7E250309-007		
	4500	4700	mg/kg	3.7	(0-20)	MSA WALKLEY-BLACK	06/05/07	7156306

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

CONESTOGA-ROVERS & ASSOCIATES
8615 W. Bryn Mawr Avenue
Chicago, Illinois 60631
(773)380-9933 phone
(773)380-6421 fax

SHIPPED TO (Laboratory Name): STL North Canton

REFERENCE NUMBER: 398216

PROJECT NAME: H. Kramer

CHAIN-OF-CUSTODY RECORD

SAMPLER'S SIGNATURE: Sadie Rc PRINTED NAME: Sadie Punch

SEQ. No.	DATE	TIME	SAMPLE IDENTIFICATION No.	SAMPLE MATRIX	No. OF CONTAINERS	PARAMETERS: pH	PARAMETERS: TOC	REMARKS
	5/21/07	9:15	S-052107-SP-03	Soil	1	X	X	
	↓	11:15	↓ -04	↓	1	X	X	
TOTAL NUMBER OF CONTAINERS					2			

RELINQUISHED BY: ① Sadie Punch	DATE: 5/23/07 TIME: 17:00	RECEIVED BY: ②	DATE: TIME:
RELINQUISHED BY: ②	DATE: TIME:	RECEIVED BY: ③	DATE: TIME:
RELINQUISHED BY: ②	DATE: TIME:	RECEIVED BY: ④	DATE: TIME:

METHOD OF SHIPMENT: Fedex AIR BILL No. 9053 4268 5897

White -Fully Executed Copy
Yellow -Receiving Laboratory Copy
Pink -Shipper Copy
Goldenrod -Sampler Copy

SAMPLE TEAM: Sadie Punch

RECEIVED FOR LABORATORY BY: [illegible] STL/NC
DATE: 24 MAY 2007 TIME: 0940

№ 2212

1001-00(SOURCE)GN-CO004

STL North Canton

HK 01739

STL Cooler Receipt Form/Narrative **Lot Number:** A7E240228
North Canton Facility

Client: CEA Project: H. KRAMER Quote#: 165072
Cooler Received on: 24 MAY 2007 Opened on: 24 MAY 2007 by: [signature] (Signature)
Fedx [X] Client Drop Off [ ] UPS [ ] DHL [ ] FAS [ ] STL Courier [ ]
Stetson [ ] US Cargo [ ] Other: _____
STL Cooler No# _____ Foam Box [ ] Client Cooler [X] Other _____

1. Were custody seals on the outside of the cooler? Yes [ ] No [X] Intact? Yes [ ] No [ ] NA [X]
   If YES, Quantity _____
   Were the custody seals signed and dated? Yes [ ] No [ ] NA [X]
2. Shipper's packing slip attached to this form? Yes [X] No [ ] NA [ ]
3. Did custody papers accompany the samples? Yes [X] No [ ] Relinquished by client? Yes [X] No [ ]
4. Did you sign the custody papers in the appropriate place? Yes [X] No [ ]
5. Packing material used: Bubble Wrap [X] Foam [ ] None [ ] Other: _____
6. Cooler temperature upon receipt 5.0 °C (see back of form for multiple coolers/temp)

METHOD: Temp Vial [ ] Coolant & Sample [ ] Against Bottles [ ] IR [X] ICE/H_2O Slurry [ ]
COOLANT: Wet Ice [X] Blue Ice [ ] Dry Ice [ ] Water [ ] None [ ]

7. Did all bottles arrive in good condition (Unbroken)? Yes [X] No [ ]
8. Could all bottle labels and/or tags be reconciled with the COC? Yes [X] No [ ]
9. Were samples at the correct pH upon receipt? Yes [ ] No [ ] NA [X]
10. Were correct bottles used for the tests indicated? Yes [X] No [ ]
11. Were air bubbles >6 mm in any VOA vials? Yes [ ] No [ ] NA [X]
12. Sufficient quantity received to perform indicated analyses? Yes [X] No [ ]
13. Was a Trip Blank present in the cooler? Yes [ ] No [X] Were VOAs on the COC? Yes [ ] No [X]

Contacted PM _____ Date: _____ by: _____ via Voice Mail [ ] Verbal [ ] Other [ ]
oncerning:

1. CHAIN OF CUSTODY

The following discrepancies occurred:

2. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.

3. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in sample receiving to meet recommended pH level(s). *Nitric Acid Lot #110106 - Sulfuric Acid Lot # 092006-H2SO4; Sodium Hydroxide Lot # -122805 -NaOH; Hydrochloric Acid Lot # 100504-HCl; Sodium Hydroxide and Zinc Acetate Lot # 050205-CH3COO22N/NaOH*
Sample(s) _____ were received with bubble > 6 mm in diameter (cc: PM)

4. Other (see below or back)

Client ID	pH	Date	Initials

SOP: NC-SC-0005, Sample Receiving
N:\QAQC\NARRATIV\STL\Cooler Receipt STL\COOLER_STL_Rev 60 012407.doc

STL North Canton

STL Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler	Temp	Method	Coolant

Discrepancies Cont.

SEVERN TRENT STL

END OF REPORT

SEVERN TRENT STL

STL North Canton
4101 Shuffel Drive NW
North Canton, OH 44720

Tel: 330 497 9396 Fax: 330 497 0772
www.stl-inc.com

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CRA INC.
CHICAGO

ANALYTICAL REPORT

PROJECT NO. 39826

H. KRAMER

Lot #: A7E090191

Dave Hendren

Conestoga-Rovers & Associates
8615 W. Bryn Mawr
Chicago, IL 60631

SEVERN TRENT LABORATORIES, INC.

Amy L. McCormick
Project Manager

May 17, 2007

CASE NARRATIVE
A7E090191

The following report contains the analytical results for two solid samples submitted to STL North Canton by Conestoga-Rovers & Associates, Inc. from the H. Kramer Site, project number 39826. The samples were received May 09, 2007, according to documented sample acceptance procedures.

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

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

All solid sample results are reported on an "as received" basis unless otherwise indicated by a dry weight adjustment footnote at the bottom of the analytical report page. The list of parameters which are never reported on a dry weight basis is included on the Sample Summary.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

If you have any questions, please call the Project Manager, Amy L. McCormick, at 330-497-9396.

This report is sequentially paginated. The final page of the report is labeled as "END OF REPORT." The total number of pages in this report is 21.

SUPPLEMENTAL QC INFORMATION

SAMPLE RECEIVING

The temperature of the cooler upon sample receipt was 1.7°C.

CASE NARRATIVE (continued)

GENERAL CHEMISTRY

The analytical results met the requirements of the laboratory's QA/QC program.

QUALITY CONTROL ELEMENTS OF SW-846 METHODS

STL North Canton conducts a quality assurance/quality control (QA/QC) program designed to provide scientifically valid and legally defensible data. Toward this end, several types of quality control indicators are incorporated into the QA/QC program, which is described in detail in QA Policy, QA-003. These indicators are introduced into the sample testing process to provide a mechanism for the assessment of the analytical data.

QC BATCH

Environmental samples are taken through the testing process in groups called QUALITY CONTROL BATCHES (QC batches). A QC batch contains up to twenty environmental samples of a similar matrix (water, soil) that are processed using the same reagents and standards. STL North Canton requires that each environmental sample be associated with a QC batch.

Several quality control samples are included in each QC batch and are processed identically to the twenty environmental samples. These QC samples include a METHOD BLANK (MB), a LABORATORY CONTROL SAMPLE (LCS) and, where appropriate, a MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD) pair or a MATRIX SPIKE/SAMPLE DUPLICATE (MS/DU) pair. If there is insufficient sample to perform an MS/MSD or an MS/DU, then a LABORATORY CONTROL SAMPLE DUPLICATE (LCSD) is included in the QC batch.

LABORATORY CONTROL SAMPLE

The Laboratory Control Sample is a QC sample that is created by adding known concentrations of a full or partial set of target analytes to a matrix similar to that of the environmental samples in the QC batch. The LCS analyte recovery results are used to monitor the analytical process and provide evidence that the laboratory is performing the method within acceptable guidelines. All control analytes indicated by a bold type in the LCS must meet acceptance criteria. Failure to meet the established recovery guidelines requires the repreparation and reanalysis of all samples in the QC batch. The only exception is that if the LCS recoveries are biased high and the associated sample is ND (non-detected) for the parameter(s) of interest, the batch is acceptable.

At times, a Laboratory Control Sample Duplicate (LCSD) is also included in the QC batch. An LCSD is a QC sample that is created and handled identically to the LCS. Analyte recovery data from the LCSD is assessed in the same way as that of the LCS. The LCSD recoveries, together with the LCS recoveries, are used to determine the reproducibility (precision) of the analytical system. Precision data are expressed as relative percent differences (RPDs). If the RPD fails for an LCS/LCSD and yet the recoveries are within acceptance criteria, the batch is still acceptable.

METHOD BLANK

The Method Blank is a QC sample consisting of all the reagents used in analyzing the environmental samples contained in the QC batch. Method Blank results are used to determine if interference or contamination in the analytical system could lead to the reporting of false positive data or elevated analyte concentrations. All target analytes must be below the reporting limits (RL) or the associated sample(s) must be ND except under the following circumstances:

- Common organic contaminants may be present at concentrations up to 5 times the reporting limits. Common metals contaminants may be present at concentrations up to 2 times the reporting limit, or the reported blank concentration must be twenty fold less than the concentration reported in the associated environmental samples. (See common laboratory contaminants listed below.)
-

Volatile (GC or GC/MS)	Semivolatile (GC/MS)	Metals ICP-MS	Metals ICP Trace
Methylene Chloride, Acetone, 2-Butanone	Phthalate Esters	Copper, Iron, Zinc, Lead, Calcium, Magnesium, Potassium, Sodium, Barium, Chromium, Manganese	Copper, Iron, Zinc, Lead

QUALITY CONTROL ELEMENTS OF SW-846 METHODS
(Continued)

- Organic blanks will be accepted if compounds detected in the blank are present in the associated samples at levels 10 times the blank level. Inorganic blanks will be accepted if elements detected in the blank are present in the associated samples at 20 times the blank level.

- Blanks will be accepted if the compounds/elements detected are not present in any of the associated environmental samples.

Failure to meet these Method Blank criteria requires the repreparation and reanalysis of all samples in the QC batch.

MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A Matrix Spike and a Matrix Spike Duplicate are a pair of environmental samples to which known concentrations of a full or partial set of target analytes are added. The MS/MSD results are determined in the same manner as the results of the environmental sample used to prepare the MS/MSD. The analyte recoveries and the relative percent differences (RPDs) of the recoveries are calculated and used to evaluate the effect of the sample matrix on the analytical results. Due to the potential variability of the matrix of each sample, the MS/MSD results may not have an immediate bearing on any samples except the one spiked; therefore, the associated batch MS/MSD may not reflect the same compounds as the samples contained in the analytical report. When these MS/MSD results fail to meet acceptance criteria, the data is evaluated. If the LCS is within acceptance criteria, the batch is considered acceptable. The acceptance criteria do not apply to samples that are diluted for organics if the native sample amount is 4x the concentration of the spike.

For certain methods, a Matrix Spike/Sample Duplicate (MS/DU) may be included in the QC batch in place of the MS/MSD. For the parameters (i.e. pH, ignitability) where it is not possible to prepare a spiked sample, a Sample Duplicate may be included in the QC batch. However, a Sample Duplicate is less likely to provide usable precision statistics depending on the likelihood of finding concentrations below the standard reporting limit. When the Sample Duplicate result fails to meet acceptance criteria, the data is evaluated.

SURROGATE COMPOUNDS

In addition to these batch-related QC indicators, each organic environmental and QC sample is spiked with surrogate compounds. Surrogates are organic chemicals that behave similarly to the analytes of interest and that are rarely present in the environment. Surrogate recoveries are used to monitor the individual performance of a sample in the analytical system.

If surrogate recoveries are biased high in the LCS, LCSD, or the Method Blank, and the associated sample(s) are ND, the batch is acceptable. Otherwise, if the LCS, LCSD, or Method Blank surrogate(s) fail to meet recovery criteria, the entire sample batch is reprepped and reanalyzed. If the surrogate recoveries are outside criteria for environmental samples, the samples will be reprepped and reanalyzed unless there is objective evidence of matrix interference or if the sample dilution is greater than the threshold outlined in the associated method SOP.

For the GC/MS BNA methods, the surrogate criterion is that two of the three surrogates for each fraction must meet acceptance criteria. The third surrogate must have a recovery of ten percent or greater.

For the Pesticide, PCB, and PAH methods, the surrogate criterion is that one of two surrogate compounds must meet acceptance criteria.

STL North Canton Certifications and Approvals:

California (#01144CA), Connecticut (#PH-0590), Florida (#E87225), Illinois (#200004), Kansas (#E10336), Minnesota (#39-999-348), New Jersey (#OH001), New York (#10975), Ohio (#6090), OhioVAP (#CL0024), Utah (#QUAN9), West Virginia (#210), Wisconsin (#999518190),NAVY, ARMY, USDA Soil Permit, ACIL Seal of Excellence – Participating Lab Status Award (#82)

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EXECUTIVE SUMMARY - Detection Highlights

A7E090191

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
S-050707-SP-01 05/07/07 09:35 001				
pH (solid)	7.7		No Units	SW846 9045C
Percent Solids	82.0	10.0	%	MCAWW 160.3 MOD
Total Organic Carbon	1900	120	mg/kg	MSA WALKLEY-BLACK
S-050707-SP-02 05/07/07 11:40 002				
pH (solid)	7.9		No Units	SW846 9045C
Percent Solids	82.3	10.0	%	MCAWW 160.3 MOD
Total Organic Carbon	1800	120	mg/kg	MSA WALKLEY-BLACK

ANALYTICAL METHODS SUMMARY

A7E090191

PARAMETER	ANALYTICAL METHOD
Soil and Waste pH	SW846 9045C
Total Organic Carbon	MSA WALKLEY-BLACK
Total Residue as Percent Solids	MCAWW 160.3 MOD

References:

MCAWW "Methods for Chemical Analysis of Water and Wastes", EPA-600/4-79-020, March 1983 and subsequent revisions.

MSA "Methods of Soil Analysis, Chemical and Microbiological Properties", Part 2, 2nd Ed., 1982 and Subsequent Revisions.

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

A7E090191

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
JWJ80	001	S-050707-SP-01	05/07/07	09:35
JWJ9F	002	S-050707-SP-02	05/07/07	11:40

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-050707-SP-01

General Chemistry

Lot-Sample #...: A7E090191-001 Work Order #...: JWJ80 Matrix.....: SO
Date Sampled...: 05/07/07 09:35 Date Received..: 05/09/07
% Moisture.....: 18

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	7.7		No Units	SW846 9045C	05/09/07	7129545
	Dilution Factor: 1					
Percent Solids	82.0	10.0	%	MCAWW 160.3 MOD	05/14-05/15/07	7134529
	Dilution Factor: 1					
Total Organic Carbon	1900	120	mg/kg	MSA WALKLEY-BLACK	05/11/07	7131288
	Dilution Factor: 1					

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

Conestoga-Rovers & Associates, Inc.

Client Sample ID: S-050707-SP-02

General Chemistry

Lot-Sample #...: A7E090191-002 Work Order #...: JWJ9F Matrix.....: SO
Date Sampled...: 05/07/07 11:40 Date Received..: 05/09/07
% Moisture.....: 18

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)	7.9		No Units	SW846 9045C	05/09/07	7129545
	Dilution Factor: 1					
Percent Solids	82.3	10.0	%	MCAWW 160.3 MOD	05/14-05/15/07	7134529
	Dilution Factor: 1					
Total Organic Carbon	1800	120	mg/kg	MSA WALKLEY-BLACK	05/11/07	7131288
	Dilution Factor: 1					

NOTE(S):

RL Reporting Limit

Results and reporting limits have been adjusted for dry weight.

SEVERN TRENT STL

QUALITY CONTROL SECTION

METHOD BLANK REPORT

General Chemistry

Client Lot #...: A7E090191 **Matrix.....:** SOLID

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids		Work Order #:	JW1CP1AA	MB Lot-Sample #:	A7E140000-529	
	ND	10.0	%	MCAWW 160.3 MOD	05/14-05/15/07	7134529
		Dilution Factor: 1				
Total Organic Carbon		Work Order #:	JWRKP1AA	MB Lot-Sample #:	A7E110000-288	
	ND	100	mg/kg	MSA WALKLEY-BLACK	05/11/07	7131288
		Dilution Factor: 1				

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: A7E090191 **Matrix.....:** SOLID

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)		Work Order #: JWLW71AA	LCS Lot-Sample#: A7E090000-545		
	100	(97 - 103)	SW846 9045C	05/09/07	7129545
		Dilution Factor: 1			
Total Organic Carbon		Work Order #: JWRKP1AC	LCS Lot-Sample#: A7E110000-288		
	100	(51 - 128)	MSA WALKLEY-BLACK	05/11/07	7131288
		Dilution Factor: 1			

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A7E090191 **Work Order #...:** JWJ10-SMP JWJ10-DUP **Matrix.....:** SOLID

Date Sampled...: 05/07/07 08:50 **Date Received..:** 05/09/07

% Moisture.....: 15

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
pH (solid)						SD Lot-Sample #:	A7E090144-005	
	9.2	9.0	No Units	2.3	(0-20)	SW846 9045C	05/09/07	7129545

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A7E090191 **Work Order #...:** JWLXP-SMP JWLXP-DUP **Matrix.....:** SOLID

Date Sampled...: 03/27/07 10:55 **Date Received..:** 05/09/07

% Moisture.....: 15

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Total Organic Carbon						SD Lot-Sample #: A7E090382-001		
	650	560	mg/kg	14	(0-20)	MSA WALKLEY-BLACK	05/11/07	7131288

Dilution Factor: 1

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Results and reporting limits have been adjusted for dry weight.

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A7E090191 **Work Order #...:** JWVN7-SMP JWVN7-DUP **Matrix.....:** SOLID

Date Sampled...: 05/11/07 09:00 **Date Received..:** 05/12/07

% Moisture.....: 12

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #:	A7E120146-002	
	88.4	89.2	%	0.84	(0-20)	MCAWW 160.3 MOD	05/14-05/15/07	7134529

Dilution Factor: 1

SAMPLE DUPLICATE EVALUATION REPORT

General Chemistry

Client Lot #...: A7E090191 **Work Order #...:** JWV3G-SMP JWV3G-DUP **Matrix.....:** SOLID

Date Sampled...: 05/11/07 13:00 **Date Received..:** 05/12/07

% Moisture.....: 8.9

PARAM	RESULT	DUPLICATE RESULT	UNITS	RPD	RPD LIMIT	METHOD	PREPARATION-ANALYSIS DATE	PREP BATCH #
Percent Solids						SD Lot-Sample #:	A7E120175-001	
	91.1	90.0	%	1.2	(0-20)	MCAWW 160.3 MOD	05/14-05/15/07	7134529

Dilution Factor: 1

CONESTOGA-ROVERS & ASSOCIATES
8615 W. Bryn Mawr Avenue
Chicago, Illinois 60631
(773)380-9933 phone
(773)380-6421 fax

CHAIN-OF-CUSTODY RECORD

SHIPPED TO (Laboratory Name): STL North Canton

REFERENCE NUMBER: 39826

PROJECT NAME: H. Kramer

SAMPLER'S SIGNATURE: Sadie Punch PRINTED NAME: Sadie Punch

SEQ. No.	DATE	TIME	SAMPLE IDENTIFICATION No.	SAMPLE MATRIX	No. OF CONTAINERS	TOC	pH									REMARKS
	5/7/07	9:35	S-050707-SP-01	Soil	1	X	X									
	5/7/07	11:40	S-050707-SP-02	Soil	1	X	X									
			TOTAL NUMBER OF CONTAINERS		2											

RELINQUISHED BY: ① Sadie Punch	DATE: 5/8/07 TIME: 17:00	RECEIVED BY: ②	DATE: TIME:
RELINQUISHED BY: ②	DATE: TIME:	RECEIVED BY: ③	DATE: TIME:
RELINQUISHED BY: ②	DATE: TIME:	RECEIVED BY: ④	DATE: TIME:

METHOD OF SHIPMENT: Fedex AIR BILL No. 9053 4268 5280

White -Fully Executed Copy
Yellow -Receiving Laboratory Copy
Pink -Shipper Copy
Goldenrod -Sampler Copy

SAMPLE TEAM: Sadie Punch

RECEIVED FOR LABORATORY BY: [signature] DATE: 5/8/07 TIME: 1000

№ 2250

1001- URCE)GN-CO004

STL North Canton

HK 01760

STL Cooler Receipt Form/Narrative **Lot Number:** A7E090191

North Canton Facility

lient: CRA Project: _____ Quote#: 65072

Cooler Received on: 5-9-07 Opened on: 5-9-07 by: [illegible] (Signature)

Fedx ☒ Client Drop Off ☐ UPS ☐ DHL ☐ FAS ☐ STL Courier ☐

Stetson ☐ US Cargo ☐ Other: _____

STL Cooler No# _____ Foam Box ☐ Client Cooler ☒ Other _____

1. Were custody seals on the outside of the cooler? Yes ☐ No ☒ Intact? Yes ☐ No ☐ NA ☒
   If YES, Quantity _____
   Were the custody seals signed and dated? Yes ☐ No ☐ NA ☒
2. Shipper's packing slip attached to this form? Yes ☒ No ☐ NA ☐
3. Did custody papers accompany the samples? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Did you sign the custody papers in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☒ Foam ☐ None ☐ Other: _____
6. Cooler temperature upon receipt 1.7 °C (see back of form for multiple coolers/temp)

METHOD: Temp Vial ☐ Coolant & Sample ☐ Against Bottles ☐ IR ☒ ICE/H_2O Slurry ☐

COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐

7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels and/or tags be reconciled with the COC? Yes ☒ No ☐
9. Were samples at the correct pH upon receipt? Yes ☐ No ☐ NA ☒
10. Were correct bottles used for the tests indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☐ NA ☒
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a Trip Blank present in the cooler? Yes ☐ No ☒ Were VOAs on the COC? Yes ☐ No ☒

Contacted PM _____ Date: _____ by: _____ via Voice Mail ☐ Verbal ☐ Other ☐

ncerning:

1. CHAIN OF CUSTODY

The following discrepancies occurred:

2. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

3. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in sample receiving to meet recommended pH level(s). *Nitric Acid Lot #110106 - Sulfuric Acid Lot # 092006-H2SO4; Sodium Hydroxide Lot # -122805 -NaOH; Hydrochloric Acid Lot # 100504-HCl; Sodium Hydroxide and Zinc Acetate Lot # 050205-CH3COO2ZN/NaOH*

Sample(s) _____ were received with bubble > 6 mm in diameter (cc: PM)

4. Other (see below or back)

Client ID	pH	Date	Initials

SOP: NC-SC-0005, Sample Receiving
N:\QAQC\NARRATIV\STL\Cooler Receipt STL\COOLER_STL_Rev 60 012407.doc

STL North Canton

STL Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler	Temp	Method	Coolant

Discrepancies Cont.

SEVERN TRENT STL

END OF REPORT