UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

MAY 12 2011

ENFORCEMENT ACTION MEMORANDUM

SUBJECT: Request for Approval for Removal Action at the Welch Group Environmental (WGE) Fair Play Site, Oconee County, South Carolina

FROM: Leo Francendese, On-Scene Coordinator
Emergency Response and Removal Branch

THRU: Shane Hitchcock, R4 Chief
Emergency Response and Removal Branch

TO: Franklin E. Hill, Director
Superfund Division

SITE ID: B4F1

I. PURPOSE

The purpose of this Action Memorandum is to request and document approval of a proposed time-critical removal action described herein for the Welch Group Environmental Fair Play Site (the Site) in Fairplay, Oconee County, South Carolina. The release of hazardous substances at the Site poses a threat to public health and the environment pursuant to Section 104(a) of CERCLA and the conditions at the Site meet the National Oil and Hazardous Substances Pollution Contingency Plan (NCP), Section 300.415(b)(2) criteria for removal actions.

This action will be implemented under an Administrative Order and Agreement on Consent (AOC) with the Welch Group Environmental (WGE) and James O. Feltman, Sr. and Sarah Francis Feltman, as Trustees for the Feltman Family Trust of 2009 (the Trust), under Sections 104(a), 106(a), and 107 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980. This removal action involves the removal, processing, and disposal of lead contaminated debris, wastes, contaminated structures and soil as well as to be determined waste oils.

II. SITE CONDITIONS AND BACKGROUND

Site Specific ID Number: B4F1
Removal Category: Time-Critical Removal Action
CERCLIS ID:

A. Site Description

This section of the Action Memorandum provides a description of the Site conditions and relevant background information.

1. Removal Site Evaluation

The WGE Fair Play facility was used for smelting and molding of lead and other metals from spent munitions gathered from firing ranges around the Southeast. .

On January 31, 2011, EPA initiated the removal site inspection (RSI) component of the removal site evaluation (RSE) at the WGE Fair Play facility. X-Ray Fluorescence (XRF) and laboratory results for soil samples collected during the RSE are summarized in this section. The full RSI report is included as Attachment A.

The Superfund Technical Assistance Response Team (START) collected a total of 75 discrete surface soil samples from 15 grids established at the Site. XRF screening results indicate measurable concentrations of lead in all 15 Grids located downgradient of the facility smelting building. Additionally, START collected and screened a total of 140 discrete surface soil samples from 28 grids established topographically upgradient from the smelting building. The screening results for each sample location are summarized in Table 1 and Table 1a (Attachment B) and on Figure 3, (Attachment C).

Eleven composite samples from 11 grids were submitted for laboratory analysis. The laboratory data indicate that 10 grids possess soil lead concentrations exceeding the residential Removal Action Level (RAL) of 400 mg/kg. Only one sample, Grid AE10, indicated soil concentrations below the RAL. A summary of the laboratory data and sample locations is presented on Table 3 (Attachment B) and Figure 5 (Attachment C). The laboratory analytical report is presented in Attachment D.

In addition to soils, START screened pallets of concrete blocks, equipment, and used vehicles located at the site. Initial indications are that items on site were impacted with lead, possibly from smelting operations. Results of the screening are presented on Table 2 (Attachment B). Figure 4 (Attachment C) shows the grid locations and associated XRF readings.

The OSC directed the PRP to take stabilizing emergency response actions that included securing the site, drum and vessel containment as well as soil sediment erosion control. This action was completed on February 21, 2011.

The RSI report was completed on March 7, 2011 and is included as Attachment A. The OSC has concluded the removal site evaluation (RSE) process and proposes further time-critical removal activities. It is the OSCs expectation that the removal action will be conducted under an AOC.

2. Physical Location

The Site is located in Fair Play, Oconee County, South Carolina. The geographic coordinates are 34° 31′ 23.96″ North latitude and 82° 59′ 28.82″ West longitude. The topographic map is presented in Attachment C. The Site is comprised of a one story house and a one story partially

enclosed brick building (smelting operation). The property is located on a hillside. Figure 2 (Attachment C) is an aerial map showing Site features. Anderson County had a total population of 184,901 in 2009. The county is primarily rural with small municipalities comprising the county.

3. Site Characteristics

The Site is industrial in nature and has been secured by fencing to prevent trespass. As previously indicated, the WGE Fair Play facility was used for smelting and molding of lead and other metals from spent munitions gathered from firing ranges around the Southeast. They then melted the lead into ingots. Other than the emergency removal actions discussed above, there have been no previous removal activities at the Site.

4. Release or Threatened Release into the Environment of a Hazardous Substance, or Pollutant or Contaminant

Lead is a hazardous substance as defined under Section 101 (14) of CERCLA and listed in Title 40 of the Code of Federal Regulation (CFR), Section 302.4. Lead is present at high levels in soils as well as vessels/drums, lead melting process shed, several onsite dump sites, various equipment and brick supplies.

5. NPL Status

The Site is not on the National Priority List.

6. Maps, Pictures, and Other Graphic Representations

All removal file information, including maps and aerial photos of the Site, will be maintained by the PRP and the OSC. These files can be viewed on the OSC webpage http://www.epaosc.org/site/site_profile.aspx?site_id=6665

B. OTHER ACTIONS TO DATE

1. Previous Actions

As indicated above, emergency removal measures were initiated at the direction of the OSC. The PRPs hired a qualified contractor to perform the emergency response actions. Both a health and safety plan (HASP) as well as removal action work plans (RAWPs) have been submitted and approved by the OSC in consult with SCDHEC. Emergency response work was completed on February 21, 2011. The work included securing the site, stabilizing/containing lead process material vessels (i.e. drums and containers) and constructing sediment erosion measures.

The removal site inspection (RSI) was completed on March 7,2011 with a subsequent removal site evaluation (RSE) recommendation for further action. A copy of the WGE Fair Play RSI report is included in Attachment A.

The OSC will continue to coordinate enforcement activities with SCDHEC. In addition, the OSC is coordinating with EPA R4 RCRA to assure that WGE proposed gun range recovery activities meet with applicable federal RCRA standards.

2. Current Actions

On February 17, 2011, the OSC requested that the PRP prepare the following plans for WGE Fair Play:

- Waste Characterization Plan (re. sampling) in order to gather the necessary information for an eventual Disposal/Recycling Options Analysis.
- Decontamination/Demolition Plan for remaining debris and structures exceeding the lead cleanup criteria.
- Soils Removal and Disposal Plan for soils exceeding the cleanup criteria.

The OSC is currently assisting the PRP by reviewing proposed RAWPs.

C. STATE AND LOCAL AUTHORITIES' ROLE

1. State and Local Actions to Date

SCDHEC ordered the cessation of operations on December 2, 2010. SCDHEC referred the Site to EPA Region 4 Emergency Response and Removal Branch (ERRB) for a RSE on December 22, 2010. A copy of the SCDHEC referral letter is included in Attachment E.

The OSC began the RSI component of the RSE during the week of January 31, 2011 and is coordinating enforcement efforts with SCDHEC using CERCLA response authority. In coordination with Air, Waste and Land Management, Site Evaluation, and Region 1 programs at SCDHEC, the OSC directed the PRPs to secure the locations, contain and secure open vessels/drums and construct a sediment/soil containment measure such as silt curtain and hay bales where appropriate. This emergency response action was completed on February 21, 2011. A copy of the WGE Fair Play daily progress report (DPR) is included in Attachment F.

2. Potential for Continued State and Local Response

EPA will continue to play a large role in the response activities at the Site and will continue to oversee activities under the AOC. EPA will coordinate with the State to ensure they are apprised of all progress made under the Administrative Order and Agreement on Consent.

III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT, AND STATUTORY AND REGULATORY AUTHORITIES

Conditions resulting from the contaminated structural surfaces, vessels and drums in disrepair, and soil at the WGE Fair Play Site present a substantial threat to the public health or welfare and the environment if not properly managed and meet the criteria for a time-critical removal action as provided for in the NCP Section 300.415(b)(2). The primary criteria include:

- **Section 300.415(b)(2)(i) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances or pollutants or contaminants**:

  The contaminated structural surfaces, vessels and drums in disrepair and soil present a potential human exposure threat through direct contact, runoff, and/or air migration.

- **Section 300.415(b)(2)(iv) High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface, that may migrate**:

  The contaminated soil presents a potential threat of migration.

IV. ENDANGERMENT DETERMINATION

Actual or threatened releases of hazardous substances from this Site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, welfare or the environment.

V. PROPOSED ACTION

A. Proposed Actions

The proposed actions listed below have been developed in coordination with the SCDHEC, EPA and the PRP. These actions are designed to promote public welfare by removing and/or remediating the contaminated structural surfaces, debris, vessels and drums in disrepair and soil from the Site. A removal action work plan will be developed by the PRP to implement the actions described below.

1. Proposed Action Description

The time critical removal action will execute the proposed actions:

- Implement an approved Health and Safety Plan
- Implement an approved Dust Monitoring and Management Plan
- Implement an approved Decontamination/Demolition Plan
- Implement an approved Soils Remediation Plan
- Implement an approved Waste Disposal Plan

2. Contribution to Remedial Performance

The proposed removal action will address the threats discussed in Section III, which meet the NCP Section 300.415(b)(2) removal criteria. The removal action contemplated in this Action Memorandum is consistent with future potential remedial actions.

3. Description of Alternative Technologies

The use of alternative technologies is not anticipated. The PRP will submit to the EPA OSC for evaluation, a technical memorandum documenting the evaluation of best management practices and available technologies concerning treatment if any treatment is to be considered.

4. Engineering Evaluation/Cost Analysis (EE/CA)

This proposed action is a time-critical removal and does not require an EE/CA.

5. Applicable or Relevant and Appropriate Requirements (ARARs)

This action is being conducted as a time-critical removal action. Pursuant to the NCP, removal actions conducted under CERCLA are required to attain ARARs to the extent practicable, considering the exigencies of the situation. Waivers described in 40 CFR 300.430 may also be used for removal actions. Potential ARARs for this Site include portions of RCRA Subtitle C and DOT requirements for management and shipment of hazardous waste, respectively. All wastes transferred off-site will comply with the CERCLA Off-Site Rule pursuant to CERCLA 121(d)(3) and 40 CFR 300.440.

A. Project Schedule

Removal activities began as an emergency action under the direction of the OSC. A removal action work plan will be developed to provide more details on the anticipated productivity of the removal and disposal, both of which will impact the schedule.

B. Estimated Costs

Estimated costs are not included as this removal action is anticipated to be implemented as an enforcement-lead action.

VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN

Failure to conduct this action in a timely manner increases the likelihood of human health exposure.

VII. OUTSTANDING POLICY ISSUES

There are no outstanding policy issues.

VIII. ENFORCEMENT

This action is being undertaken pursuant to an AOC between WGE, The Trust, and EPA.

IXI. REFERENCES

http://www.epaosc.org/site/site_profile.aspx?site_id=6665

X. RECOMMENDATION

This decision document represents the selected removal action for the Welch Group Environmental Fairplay Site, developed in accordance with CERCLA as amended, and not inconsistent with the National Contingency Plan (NCP). The document is based on the administrative record for the Site.

Conditions at the Site meet the NCP Section 300.415 (b)(2) criteria for a time-critical removal action.

APPROVED: _____ DATE: 5/12/11
Franklin E. Hill, Director
Superfund Division

DISAPPROVED: _____ DATE: _____
Franklin E. Hill, Director
Superfund Division

Attachments

OTIE
Oneida Total Integrated Enterprises

March 6, 2011

Mr. Leo Francendese
On-Scene Coordinator
U.S. Environmental Protection Agency
61 Forsyth Street, SW 11th Floor
Atlanta, Georgia 30303

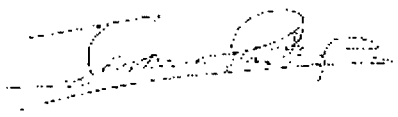
Subject: **Removal Site Inspection, Revision 0**
Welch Group Environmental (WGE) Fair Play Site
170 Feltman Farm Road, Oconee County, Fair Play, South Carolina
EPA Contract No. EP-W-05-053
Technical Direction Document (TDD) No. TNA-05-001-0126

Dear Mr. Francendese:

Oneida Total Integrated Enterprises (OTIE) Superfund Technical Assessment and Response Team (START) is submitting one copy of the Removal Site Inspection (RSI) for the Welch Group Environmental (WGE) Fair Play facility located in Fair Play, Oconee County, South Carolina.

Please contact me at (678) 355-5550 ext. 5708 if you any questions or comments regarding this report.

Sincerely,



Jerry Partap
START Project Manager

Enclosure

cc: Katrina Jones, EPA Project Officer
Darryl Walker, EPA Project Officer
Russell Henderson, START Program Manager (w/o enclosure)
START File

REMOVAL SITE INSPECTION

WELCH GROUP ENVIRONEMNTAL (WGE)
FAIRPLAY SITE
FAIR PLAY, OCONEE COUNTY, SOUTH CAROLINA

Revision 0

Prepared for:

U.S. ENVIRONMENTAL PROTECTION AGENCY
Region 4
61 Forsyth Street
Atlanta, Georgia 30303

Prepared by:

Oneida Total Integrated Enterprises
Superfund Technical Assessment and Response Team
1220 Kennestone Circle, Suite D
Marietta, Georgia 30066

Contract No.	:	EP-W-05-053
TDD Number	:	TNA-05-001-0126
Date Submitted	:	March 2, 2011
EPA OSC	:	Leo Francendese
Telephone No.	:	404-606-2223
Prepared by	:	Jerry Partap
Telephone No.	:	678-355-5550 ext. 5708

1.0 INTRODUCTION

The U.S. Environmental Protection Agency (EIPA) tasked the Oneida Total Integrated Enterprises (OTIE) Superfund Technical Assessment and Response Team (START) to perform field activities in support of the On Scene Coordinator (OSC) for the U.S. Environmental Protection Agency (EPA) at the Welch Group Environmental (WGE) Fair Play Site, located in Fair Play, Oconee County, South Carolina. The field activities include maintaining the EPA OSC site webpage (Fair Play Site), compiling site history and maps, and managing field data. The site activities are conducted under Contract Number (No.) EP-W-05-053 and Technical Direction Document (TDD) No. TNA-05-001-0126. The general purpose of the RSI is to collect information to assist in determining whether Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) hazardous substances have been released into the environment. Specifically, findings will identify the need for federal intervention under the CERCLA of 1980 and the Superfund Amendments and Reauthorization Act (SARA) of 1986. In addition, the EPA OSC expanded the scope of the above actions by directing the PRP to conduct an emergency response (Pol/Sitrep #1). START expanded its role in support of this additional action.

Specifically, START was tasked with the following:

- Prepare a Health and Safety Plan (START HASP);
- Prepare a Quality Assurance Project Plan (QAPP)/Site Sampling Plan (START Sampling Plan) (SSP);
- Screen surface and subsurface soil for lead concentrations using a Niton® X-Ray Fluorescence (XRF) elemental detector;
- Submit a limited number of soil samples to a laboratory for total lead analysis (Laboratory Report);
- Document site activities with written logbook notes (START Fieldnotes), digital photographs (Photolog) and maintain the OSC webpage (Fair Play Site);
- Prepare a comprehensive report summarizing the site conditions, field investigation activities, and analytical results of the RSI.

This RSE Report summarizes the existing conditions at the site; describes the field investigation activities conducted by START in February 2011; and, delineates the limits, nature, and extent of soil contamination at the site. All activities and procedures described in this report were performed in accordance with the EPA Region 4 *Field Branches Quality System and Technical Procedures* (FBQSTP) (EPA Region 4 Technical Procedures).

2.0 SITE BACKGROUND

This section discusses the site characteristics, previous investigations, and environmental setting of the area.

2.1 SITE DESCRIPTION

The site is located in Fair Play, Oconee County, South Carolina. The geographic coordinates are 34° 31′ 23.96″ North latitude and 82° 59′ 28.82″ West longitude (Figure 1). The site is comprised of a one story house and a one story partially enclosed brick building (smelting operation). The property is located on a hillside that is owned by Mr. James Feltman. The Feltman property is located on a 22-acre parcel, and smelting operations were conducted on approximately 6 acres.

Topographically upgradient of the smelting building there are equipment, scrap metal, deteriorated cars, trucks, and tractors scattered on the property. Downgradient of the smelting building there are several box trailers and multiple pallets of concrete blocks.

The site is bordered by State Road South 37 to the north, to the east by Highway 59, agricultural land to the west, and a wetland to the south (Figure 2). Topographically, the site drains generally to the northeast.

The property is owned by Mr. Feltman and leased to Mr. Glenn Welch of WGE. WGE operations at this site involved the smelting and molding of lead recovered from both indoor and outdoor shooting ranges across the United States.

2.2 PREVIOUS INVESTIGATIONS

The South Carolina Department of Health and Environmental Control (SCDHEC) conducted an initial site inspection on November 3, 2010. Details of the SCDHEC report can be found on the OSC web page at the following link (SCDHEC Memo).

The site was referred to the EPA on December 22, 2010 by the South Carolina Bureau of Land and Waste Management. Details of the SCDHEC referral letter can be found on the OSC web page (SCDHEC Referral).

On January 31, 2011, the EPA On-Scene Coordinator (OSC), SC DHEC, START, the property owner (James Feltman), and WGE (Glenn Welch) conducted a removal site inspection. According to Mr. Welch, WGE has been operating at this location for approximately 14 months. After material separation at the WGE Anderson facility, the WGE Fair Play facility was used for smelting and molding of lead. The photographic log (Photolog) and field logbook notes (START Fieldnotes).

3.0 FIELD INVESTIGATION ACTIVITIES

On February 1 and 3, 2011, START performed a preliminary RSE that included surface soil screening, soil sampling, and analysis activities at the site to identify the nature and extent of lead contamination in on-site soils from site operations. START utilized an XRF instrument to screen on-site soils for lead contamination to a maximum depth of 6 inches below ground surface (bgs). The EPA OSC indicated that soil samples were only to be collected from 0 to 6 inches bgs.

START collected a total of 75 discrete surface soil samples from 15 grids using stainless steel spoons for screening using the XRF. These discrete soil samples were collected topographically downgradient from the smelting building. Additionally, START collected a total of 140 discrete surface soil samples from 28 grids using stainless steel spoons for screening using the XRF. These discrete soil samples were collected topographically upgradient from the smelting building. One sample of the surface material was collected from the concrete floor of the smelting building.

In addition to the samples collected for XRF screening, composite samples were collected of the screened soils and submitted for laboratory analysis. These composite samples collected for laboratory analysis were from the downgradient portion of the site. A total of 11 soil composite samples and one duplicate were submitted to Gulf Coast Analytical Laboratories (GCAL) for analysis of total lead in accordance with SW846 Method 6010C, and five soil composite samples and one duplicate were submitted to GCAL for analysis of Target Analyte List (TAL) Metals in accordance with SW846 Method 6010C/7471B. The sample of the surface material that was collected from the concrete floor of the smelting building was submitted for total lead and TAL metals analysis. The data gathered during the RSI will be used to determine the release or substantial threat of release of a CERCLA hazardous substance.

Geographic positioning information was collected for all sampling locations and was geographically referenced using ArcView and uploaded to a hand-held Trimble® Global Positioning System (GPS). (Table 1) and (Table 1a) presents the GPS coordinates for each sample location.

3.1 SURFACE SOIL SCREENING

On February 1 and 3, 2011, START collected surface soil samples for screening purposes. The site was subdivided into 50 foot (ft) x 50 ft sampling grids. Based on the site topography and drainage pattern, the EPA OSC directed START to grid areas along the drainage patterns. Five-point discrete surface soil samples (0 to 6 inches) were collected from each grid location and screened using the XRF. Each sample was collected using stainless steel spoons, placed in zip top bags, and screened using the XRF. The lead results detected on the XRF were compared to the Region 4 Regional Screening Level (RSL) for residential soil of 400 parts per million (ppm). Screening results for each sample location are found on (Figure 3) and are summarized on (Table 1).

Additionally on February 8, 2011, the EPA directed START to screen the surface soils upgradient of the smelter building. START collected a total of 140 discrete surface soil samples from 28 grids using stainless steel spoons for screening using the XRF. The samples were only collected for screening purposes. A summary of the XRF soil screening results are presented on (Table 1a) and the screening results for each sample location is found on (Figure 3).

3.2 OSC REQUIRED EMERGENCY RESPONSE (ER) ACTIONS

On January 31, 2011, the EPA discussed with WGE the ER actions required to the secure the site (WGE Workplan). The EPA OSC directed WGE to immediately complete the following site tasks (WGE Progress Report):

1) Install silt fencing to limit the further impact of potentially impacted surface water off-site;
2) Secure and/or overpack all open containers with lead related material in the smelting building pending disposal/recycling;
3) Secure site with security tape until removal activities.

3.3 XRF SCREENING OF CONCRETE BLOCKS, EQUIPMENT, AND USED VEHICLES

On February 1, 3, 8, and 9, 2011, the EPA OSC tasked START to screen the pallets of concrete blocks, equipment, and used vehicles located at the site. On February 1 and 3, 2011, START screened the pallets of concrete blocks that were located downgradient of the smelting building. The results from the XRF screening indicated approximately 45% of the items screened were impacted with lead concentrations greater than the Region 4 RSL for residential soil of 400 ppm.

On February 3, 8, and 9, 2011, START screened the equipment and used vehicles upgradient of the smelting building. The XRF results indicated lead impacts, possibly from site operations, above the Region 4 RSL for residential soil of 400 ppm. A summary of the XRF readings and grid locations is presented in (Table 2). (Figure 4) shows the grid location and associated XRF readings.

On February 17, 2011, the EPA OSC directed START to collect representative paint samples from two old vehicles staged on the upgradient portion of the property in order to gain a representation of the vehicles upgradient of the smelting building. The samples were submitted to GCAL for laboratory analysis of lead. A summary of the analytical results is included on (Table 3). The laboratory report (Laboratory Report) can be viewed at the following link.

3.4 SURFACE SOIL SAMPLING

A composite sample from each of the 15 grids was submitted for laboratory analysis. The five discrete samples that were collected and screened using the XRF from each of the 15 grids were homogenized in stainless steel bowls, containerized, placed on ice, documented, and shipped under standard chain-of-custody procedures to GCAL in Baton Rouge, Louisiana. The soil samples were compared to the Region 4 Regional Screening Level (RSL) for residential soil of 400 milligrams per kilogram (mg/kg). A summary of the laboratory analytical results for each sample collected are found in (Table 3). (Figure 5) depicts the areas of lead impacts to the surface soils.

3.5 SITE SECURITY AND MISCELLANEOUS ITEMS

During the site inspection, shell casings and bullet remains were discovered in the natural drainage patterns at the site. As a result, the EPA OSC instructed WGE to install silt fencing to limit the further impact of potentially impacted surface water off-site. The photographic log (Photolog) can be viewed at the following link.

During the RSE, drums of varying contents were observed on site. The EPA OSC instructed WGE to overpack deteriorated drums. WGE was also told by the EPA OSC that all drums shall be stored and secured in the former smelting building for characterization and future disposal/recycling. There were a total of 41 drums of contaminated material, and an additional 11 drums and 10 buckets of unknown material for hazardous categorization, 2 steel boxes of lead material, and 1 drum of trash (WGE Progress Report).

On February 9, 2011, WGE obtained samples of material from each of the 11 drums and 10 buckets for hazardous characterization (HazCat) testing to determine material classification. The results of the HazCat performed by WGE can be found at the following link (Fair Play Site).

4.0 QUALITY ASSURANCE/QUALITY CONTROL

QA/QC data are necessary to determine precision and accuracy and to demonstrate the absence of interferences and/or contamination of sampling equipment, glassware, and reagents. This section describes the QA/QC measures taken and provides an evaluation of the usability of data presented in this report.

A total of one duplicate (AA10-100) for total lead and one duplicate (AA9-101) for TAL metals were submitted to GCAL for analysis. The native sample (FP01-AA10) and its duplicate (AA10-100) had a high percent difference between the two samples (67%) for lead. This difference can be attributed to the heterogeneity of the soil. The native sample (FP06-AA9) and its duplicate (AA9-101) had a high percent difference between the two samples (90%) for copper (111%) and zinc (118%). This difference can be attributed to the heterogeneity of the soil (Soil Laboratory Report).

5.0 SITE INVESTIGATION RESULTS

The following sections summarize the XRF and laboratory results for soil samples collected during the RSE field sampling activities.

As discussed, above START collected a total of 75 discrete surface soil samples from 15 grids. XRF screening results indicate concentrations of lead were detected in all 15 Grids located downgradient of the smelting building. Additionally, START collected a total of 140 discrete surface soil samples from 28 grids topographically upgradient from the smelting building. The screening results for each sample location are summarized in (Table 1) and (Table 1a) and are shown on (Figure 3).

11 composite samples from 11 grids were submitted for laboratory analysis. The laboratory data indicated that 10 grids indicated soil lead concentrations results above the residential RSL of 400 mg/kg. Only one sample, Grid AE10, indicated soil concentrations below the RSL (Soil Laboratory Report).

Additionally, START screened pallets of concrete blocks, equipment, and used vehicles located at the site. Initial indications are that items on site were impacted with lead, possibly from smelting operations. Results of the screening are presented on (Table 2). (Figure 4) shows the grid locations and associated XRF readings.

6.0 SUMMARY AND CONCLUSIONS

The WGE Fair Play facility was used for smelting and molding of lead and other metals from spent munitions at firing ranges gathered from around the Southeast. WGE leases the property from Mr. James Feltman.

WGE was directed by the EPA OSC to submit workplans that were approved for securing the facility. WGE installed silt fencing to limit the amount of potentially impacted surface water leaving the site. Based on the XRF results, the warehouse was limited to activity. Drums and over packed containers of exposed lead and materials that exists on site were moved and secured in the former smelting building for further disposal/recycling. On February 17th, the EPA OSC requested that WGE prepare the following plans for the WGE Fair Play facility:

- ***Waste Characterization Plan*** (re. sampling) in order to gather the necessary information for an eventual ***Disposal/Recycling Options Analysis***.
- ***Decontamination/Demolition Plan*** for remaining debris and structures exceeding the lead cleanup criteria.
- ***Soils Removal and Disposal Plan*** for soils exceeding the cleanup criteria.

Further activities associated with this site will be determined be based on the approval of the workplans listed above by the EPA OSC. The EPA OSC anticipates that the management of the site will transition into a time critical removal action under an EPA Administrative Order on Consent.

ATTACHMENT B
Tables

TABLE 1
WELCH GROUP ENVIRONMENTAL
REMOVAL SITE INVESTIGATION
FAIR PLAY, OCONEE COUNTY, SOUTH CAROLINA
XRF SOIL SCREENING RESULTS FOR THE SAMPLING LOCATIONS
FEBRUARY 1 AND 3, 2011

Grid Location	Sample Depth (fbgs)	Grid Sample No.	XRF Lead Soil Results (ppm)	+/- Error	Latitude	Longitude
AA8	0-0.5	1	250,838	2,073	34.52345844370	-82.99129979470
	0-0.5	2	243,642	2,026	34.52341785550	-82.99139089120
	0-0.5	3	419,008	3,263	34.52344822480	-82.99134466840
	0-0.5	4	13,515	245	34.52342853720	-82.99126198920
	0-0.5	5	5,749	139	34.52341123190	-82.99125505990
AA9	0-0.5	1	3,903	109	34.52348993350	-82.99124405730
	0-0.5	2	51,647	586	34.52344659190	-82.99122263580
	0-0.5	3	4,298	121	34.52348097920	-82.99118441160
	0-0.5	4	11,348	206	34.52350434380	-82.99127511920
	0-0.5	5	57,896	624	34.52345294260	-82.99123722450
AA10	0-0.5	1	11,296	189	34.52357285690	-82.99112961780
	0-0.5	2	790	49	34.52360223030	-82.99109158900
	0-0.5	3	4,076	109	34.52353858800	-82.99111298020
	0-0.5	4	4,243	113	34.52357285690	-82.99119260290
	0-0.5	5	5,205	123	34.52359831390	-82.99114863220
AB7	0-0.5	1	1,871	73	34.52324627150	-82.99132376010
	0-0.5	2	5,563	129	34.52327654030	-82.99133361290
	0-0.5	3	146,783	1,324	34.52325305610	-82.99127502630
	0-0.5	4	6,309	153	34.52320987290	-82.99131952570
	0-0.5	5	973	55	34.52329001570	-82.99130525490

TABLE 1
WELCH GROUP ENVIRONMENTAL
REMOVAL SITE INVESTIGATION
FAIR PLAY, OCONEE COUNTY, SOUTH CAROLINA
XRF SOIL SCREENING RESULTS FOR THE SAMPLING LOCATIONS
FEBRUARY 1 AND 3, 2011

Grid Location	Sample Depth (fbgs)	Grid Sample No.	XRF Lead Soil Results (ppm)	+/- Error	Latitude	Longitude
AB8	0-0.5	1	33,541	399	34.52334158970	-82.99120803130
	0-0.5	2	6,157,346	46,330	34.52337604370	-82.99123037330
	0-0.5	3	39,118	482	34.52332537540	-82.99116274500
	0-0.5	4	9,379	181	34.52329123350	-82.99121605200
	0-0.5	5	36,350	435	34.52331928000	-82.99125029870
AB9	0-0.5	1	386,305	3,157	34.52340736680	-82.99115544440
	0-0.5	2	4,426	124	34.52341552330	-82.99119485130
	0-0.5	3	28,333	388	34.52345769680	-82.99115626390
	0-0.5	4	67,678	690	34.52339111310	-82.99107722990
	0-0.5	5	2,576,349	18,612	34.52337243070	-82.99114731280
AB10	0-0.5	1	1,240	68	34.52348505550	-82.99103593710
	0-0.5	2	12,197	219	34.52346418200	-82.99107360140
	0-0.5	3	96	21	34.52351100050	-82.99100814010
	0-0.5	4	5,381	124	34.52351585270	-82.99107310550
	0-0.5	5	5,927	129	34.52344109620	-82.99101090600
AB11	0-0.5	1	6,220	162	34.52357314490	-82.99093068230
	0-0.5	2	1,258	60	34.52352904760	-82.99093854090
	0-0.5	3	2,265	79	34.52356192490	-82.99088255910
	0-0.5	4	639	43	34.52361966280	-82.99093011610
	0-0.5	5	9,944	196	34.52360085600	-82.99098296850

TABLE 1
WELCH GROUP ENVIRONMENTAL
REMOVAL SITE INVESTIGATION
FAIR PLAY, OCONEE COUNTY, SOUTH CAROLINA
XRF SOIL SCREENING RESULTS FOR THE SAMPLING LOCATIONS
FEBRUARY 1 AND 3, 2011

Grid Location	Sample Depth (fbgs)	Grid Sample No.	XRF Lead Soil Results (ppm)	+/- Error	Latitude	Longitude
AC10	0-0.5	1	4,776	117	34.52341073510	-82.99093550850
	0-0.5	2	31,608	385	34.52340156600	-82.99099970570
	0-0.5	3	711	43	34.52346646540	-82.99093512880
	0-0.5	4	559	40	34.52340136780	-82.99090738900
	0-0.5	5	888	47	34.52336864140	-82.99094838840
AC11	0-0.5	1	575	40	34.52348192730	-82.99085395960
	0-0.5	2	1,458	67	34.52352360190	-82.99085691650
	0-0.5	3	1,554	64	34.52349952510	-82.99089560450
	0-0.5	4	3,281	101	34.52345279610	-82.99086062450
	0-0.5	5	1,594	68	34.52348550710	-82.99087874460
AE9	0-0.5	1	312	30	34.52318966690	-82.99085347040
	0-0.5	2	1,986	71	34.52314179400	-82.99082361970
	0-0.5	3	1,474	59	34.52317319980	-82.99091628400
	0-0.5	4	76	17	34.52320631240	-82.99087233920
	0-0.5	5	377	32	34.52315481850	-82.99086296180
AE10	0-0.5	1	512	38	34.52327337400	-82.99071814510
	0-0.5	2	46	16	34.52330038980	-82.99073439420
	0-0.5	3	162	23	34.52322258560	-82.99072838400
	0-0.5	4	48	16	34.52329304970	-82.99070568260
	0-0.5	5	51	16	34.52323880760	-82.99073116660

TABLE 1
WELCH GROUP ENVIRONMENTAL
REMOVAL SITE INVESTIGATION
FAIR PLAY, OCONEE COUNTY, SOUTH CAROLINA
XRF SOIL SCREENING RESULTS FOR THE SAMPLING LOCATIONS
FEBRUARY 1 AND 3, 2011

Grid Location	Sample Depth (fbgs)	Grid Sample No.	XRF Lead Soil Results (ppm)	+/- Error	Latitude	Longitude
AF9	0-0.5	1	1,549	50	34.52310746200	-82.99075405890
	0-0.5	2	143	22	34.52306504580	-82.99078115950
	0-0.5	3	92	21	34.52309956100	-82.99082390460
	0-0.5	4	81	21	34.52313753560	-82.99074519840
	0-0.5	5	720	44	34.52310706290	-82.99069851540
Z7	0-0.5	1	111,667	1,113	34.52346638550	-82.99151106330
	0-0.5	2	10,378	191	34.52341849290	-82.99146734240
	0-0.5	3	133,428	1,345	34.52343231230	-82.99156977020
	0-0.5	4	535	42	34.52340245070	-82.99150994680
	0-0.5	5	1,077,621	7,792	34.52339916550	-82.99155180390
Z8	0-0.5	1	20,311	278	34.52354005000	-82.99141524990
	0-0.5	2	15,493	228	34.52350296130	-82.99144988810
	0-0.5	3	462,175	3,458	34.52346181180	-82.99142641400
	0-0.5	4	1,211	54	34.52350905610	-82.99137715490
	0-0.5	5	2,004	74	34.52349585240	-82.99136201570

Notes:

FBGS – feet below ground surface

NA – not applicable – sample was not sent to the laboratory

ppm – parts per million

XRF – X-ray refraction

Results that are shaded are above the USEPA Removal Action Level for lead in residential soil (400 ppm).

TABLE 1a
WELCH GROUP ENVIRONMENTAL
REMOVAL SITE INVESTIGATION
FAIR PLAY, OCONEE COUNTY, SOUTH CAROLINA
XRF SOIL SCREENING RESULTS FOR THE SAMPLING LOCATIONS UP-GRADIENT OF THE LEAD SMELTER SHED
FEBRUARY 8, 2011

Grid Location	Sample Depth (fbgs)	Grid Sample No.	XRF Lead Soil Results (ppm)	+/- Error	Latitude	Longitude
Z5	0-0.5	1	284	30	34.52324906070	-82.99169925450
	0-0.5	2	303	33	34.52324309490	-82.99175455660
	0-0.5	3	191	27	34.52324309490	-82.99173658950
	0-0.5	4	325	35	34.52328598580	-82.99167122100
	0-0.5	5	371	34	34.52323509900	-82.99167245700
X3	0-0.5	1	98	23	34.52327854560	-82.99210845520
	0-0.5	2	124	17	34.52332346470	-82.99209619930
	0-0.5	3	58	14	34.52323810270	-82.99214220220
	0-0.5	4	30	16	34.52325539410	-82.99203522710
	0-0.5	5	82	20	34.52329339430	-82.99214991350
Y5	0-0.5	1	143	29	34.52334705740	-82.99180079150
	0-0.5	2	69	19	34.52338814110	-82.99180203830
	0-0.5	3	53	19	34.52332506310	-82.99177089560
	0-0.5	4	40	15	34.52331474990	-82.99183341910
	0-0.5	5	52	22	34.52335232970	-82.99185529580
X4	0-0.5	1	279	28	34.52334912100	-82.99201330970
	0-0.5	2	139	26	34.52339920820	-82.99200528390
	0-0.5	3	102	21	34.52334325850	-82.99205680120
	0-0.5	4	212	23	34.52329189140	-82.99200298380
	0-0.5	5	122	20	34.52333985620	-82.99194282360

TABLE 1a
WELCH GROUP ENVIRONMENTAL
REMOVAL SITE INVESTIGATION
FAIR PLAY, OCONEE COUNTY, SOUTH CAROLINA
XRF SOIL SCREENING RESULTS FOR THE SAMPLING LOCATIONS UP-GRADIENT OF THE LEAD SMELTER SHED
FEBRUARY 8, 2011

Grid Location	Sample Depth (fbgs)	Grid Sample No.	XRF Lead Soil Results (ppm)	+/- Error	Latitude	Longitude
X5	0-0.5	1	240	29	34.52343248470	-82.99190067600
	0-0.5	2	305	35	34.52341120900	-82.99182967670
	0-0.5	3	452	34	34.52344579980	-82.99186981660
	0-0.5	4	52	18	34.52341156410	-82.99194040420
	0-0.5	5	79	16	34.52346529510	-82.99192574620
Y6	0-0.5	1	329	34	34.52351453610	-82.99182157970
	0-0.5	2	179	21	34.52347311740	-82.99176643050
	0-0.5	3	349	37	34.52350414790	-82.99176318230
	0-0.5	4	73	22	34.52353019320	-82.99184119380
	0-0.5	5	450	33	34.52345421480	-82.99183134680
X2	0-0.5	1	75	21	34.52319258500	-82.99221351170
	0-0.5	2	81	19	34.52322835950	-82.99218106510
	0-0.5	3	34	16	34.52321431490	-82.99225254830
	0-0.5	4	52	19	34.52315141810	-82.99223750010
	0-0.5	5	67	18	34.52316343380	-82.99218072020
Y4	0-0.5	1	221	24	34.52326366690	-82.99189230070
	0-0.5	2	1,196	57	34.52330846460	-82.99191610890
	0-0.5	3	126	23	34.52329519580	-82.99186405130
	0-0.5	4	242	27	34.52324036130	-82.99186366000
	0-0.5	5	130	27	34.52323177800	-82.99193990860

TABLE 1a
WELCH GROUP ENVIRONMENTAL
REMOVAL SITE INVESTIGATION
FAIR PLAY, OCONEE COUNTY, SOUTH CAROLINA
XRF SOIL SCREENING RESULTS FOR THE SAMPLING LOCATIONS UP-GRADIENT OF THE LEAD SMELTER SHED
FEBRUARY 8, 2011

Grid Location	Sample Depth (fbgs)	Grid Sample No.	XRF Lead Soil Results (ppm)	+/- Error	Latitude	Longitude
Z4	0-0.5	1	289	27	34.52320266890	-82.99181402460
	0-0.5	2	89	23	34.52322843190	-82.99181768730
	0-0.5	3	80	23	34.52318257340	-82.99185745840
	0-0.5	4	215	48	34.52314746400	-82.99180674130
	0-0.5	5	212	27	34.52317480250	-82.99175386730
AA6	0-0.5	1	750	43	34.52325588550	-82.99153411430
	0-0.5	2	725	46	34.52324048400	-82.99150461460
	0-0.5	3	675	53	34.52321825260	-82.99149727350
	0-0.5	4	175	29	34.52322548020	-82.99156175290
	0-0.5	5	69	17	34.52326675110	-82.99157316890
Z3	0-0.5	1	63	18	34.52312400670	-82.99190415220
	0-0.5	2	188	27	34.52315704760	-82.99190793940
	0-0.5	3	408	40	34.52309123030	-82.99185809580
	0-0.5	4	166	25	34.52307854260	-82.99194300060
	0-0.5	5	111	26	34.52312489010	-82.99194954830
X6	0-0.5	1	405	41	34.52351453610	-82.99182157970
	0-0.5	2	503	59	34.52347311740	-82.99176643050
	0-0.5	3	142	22	34.52350414790	-82.99176318230
	0-0.5	4	133	25	34.52353019320	-82.99184119380
	0-0.5	5	226	24	34.52345421480	-82.99183134680

TABLE 1a
WELCH GROUP ENVIRONMENTAL
REMOVAL SITE INVESTIGATION
FAIR PLAY, OCONEE COUNTY, SOUTH CAROLINA
XRF SOIL SCREENING RESULTS FOR THE SAMPLING LOCATIONS UP-GRADIENT OF THE LEAD SMELTER SHED
FEBRUARY 8, 2011

Grid Location	Sample Depth (fbgs)	Grid Sample No.	XRF Lead Soil Results (ppm)	+/- Error	Latitude	Longitude
Y1	0-0.5	1	206	29	34.52304562030	-82.99217525030
	0-0.5	2	161	23	34.52306909560	-82.99219193440
	0-0.5	3	151	21	34.52306455370	-82.99216204250
	0-0.5	4	50	13	34.52302838770	-82.99215128530
	0-0.5	5	73	17	34.52303319950	-82.99212340950
Y2	0-0.5	1	153	19	34.52311165060	-82.99209019540
	0-0.5	2	124	27	34.52309601330	-82.99204813430
	0-0.5	3	180	24	34.52306007830	-82.99209071490
	0-0.5	4	63	18	34.52316638460	-82.99209867600
	0-0.5	5	52	20	34.52312071580	-82.99214554200
AA3	0-0.5	1	89	22	34.52303793200	-82.99181686320
	0-0.5	2	174	23	34.52306597830	-82.99178217480
	0-0.5	3	129	20	34.52306505800	-82.99183154720
	0-0.5	4	64	23	34.52301177120	-82.99185357900
	0-0.5	5	85	19	34.52299178870	-82.99179028320
AB5	0-0.5	1	153	29	34.52308895520	-82.99153520060
	0-0.5	2	41	18	34.52310443530	-82.99155904170
	0-0.5	3	81	21	34.52310783660	-82.99148930070
	0-0.5	4	157	24	34.52313595100	-82.99153874190
	0-0.5	5	389	34	34.52312181120	-82.99157709870

TABLE 1a
WELCH GROUP ENVIRONMENTAL
REMOVAL SITE INVESTIGATION
FAIR PLAY, OCONEE COUNTY, SOUTH CAROLINA
XRF SOIL SCREENING RESULTS FOR THE SAMPLING LOCATIONS UP-GRADIENT OF THE LEAD SMELTER SHED
FEBRUARY 8, 2011

Grid Location	Sample Depth (fbgs)	Grid Sample No.	XRF Lead Soil Results (ppm)	+/- Error	Latitude	Longitude
AB4	0-0.5	1	97	23	34.52304076640	-82.99163176030
	0-0.5	2	135	21	34.52306854730	-82.99164250760
	0-0.5	3	468	59	34.52301375690	-82.99166911210
	0-0.5	4	52	25	34.52298979200	-82.99161257730
	0-0.5	5	268	27	34.52302290420	-82.99159103760
AB3	0-0.5	1	309	40	34.52293771940	-82.99169771400
	0-0.5	2	118	22	34.52290779560	-82.99174243000
	0-0.5	3	111	25	34.52299947410	-82.99171351770
	0-0.5	4	57	17	34.52295106550	-82.99167508440
	0-0.5	5	225	28	34.52292244040	-82.99168812240
X1	0-0.5	1	95	24	34.52309754080	-82.99228078040
	0-0.5	2	73	21	34.52308911520	-82.99224230020
	0-0.5	3	81	20	34.52312986860	-82.99225041850
	0-0.5	4	57	21	34.52306072850	-82.99230155230
	0-0.5	5	236	38	34.52315488040	-82.99229956970
AA2	0-0.5	1	56	19	34.52296459660	-82.99191916730
	0-0.5	2	84	18	34.52292451680	-82.99195480770
	0-0.5	3	83	21	34.52291156070	-82.99189703130
	0-0.5	4	169	23	34.52296964470	-82.99185781220
	0-0.5	5	184	30	34.52299938020	-82.99192113940

TABLE 1a
WELCH GROUP ENVIRONMENTAL
REMOVAL SITE INVESTIGATION
FAIR PLAY, OCONEE COUNTY, SOUTH CAROLINA
XRF SOIL SCREENING RESULTS FOR THE SAMPLING LOCATIONS UP-GRADIENT OF THE LEAD SMELTER SHED
FEBRUARY 8, 2011

Grid Location	Sample Depth (fbgs)	Grid Sample No.	XRF Lead Soil Results (ppm)	+/- Error	Latitude	Longitude
Y3	0-0.5	1	61	16	34.52318550690	-82.99198667620
	0-0.5	2	58	17	34.52317491530	-82.99193256960
	0-0.5	3	308	34	34.52322563470	-82.99198584820
	0-0.5	4	27	16	34.52315173570	-82.99204696390
	0-0.5	5	128	23	34.52314034880	-82.99200226420
Z6	0-0.5	1	1,482	55	34.52334222370	-82.99162227190
	0-0.5	2	1,309	69	34.52330808270	-82.99166522610
	0-0.5	3	350	31	34.52330355660	-82.99159200550
	0-0.5	4	216	24	34.52335284680	-82.99166980750
	0-0.5	5	208	25	34.52336754340	-82.99160328210
AC4	0-0.5	1	258	27	34.52296793740	-82.99152492020
	0-0.5	2	130	26	34.52299359270	-82.99152930400
	0-0.5	3	1,045	50	34.52299488460	-82.99151018040
	0-0.5	4	95	23	34.52297133640	-82.99148922530
	0-0.5	5	326	32	34.52294200730	-82.99154602270
AB2	0-0.5	1	170	24	34.52283648470	-82.99178905900
	0-0.5	2	145	27	34.52286245890	-82.99181396360
	0-0.5	3	24	13	34.52284136240	-82.99188098510
	0-0.5	4	49	17	34.52287662080	-82.99176914760
	0-0.5	5	< LOD	22	34.52291123630	-82.99180106120

TABLE 1a
WELCH GROUP ENVIRONMENTAL
REMOVAL SITE INVESTIGATION
FAIR PLAY, OCONEE COUNTY, SOUTH CAROLINA
XRF SOIL SCREENING RESULTS FOR THE SAMPLING LOCATIONS UP-GRADIENT OF THE LEAD SMELTER SHED
FEBRUARY 8, 2011

Grid Location	Sample Depth (fbgs)	Grid Sample No.	XRF Lead Soil Results (ppm)	+/- Error	Latitude	Longitude
AC3	0-0.5	1	73	19	34.52289745820	-82.99160253270
	0-0.5	2	136	21	34.52292644240	-82.99161717830
	0-0.5	3	56	21	34.52289309430	-82.99165968430
	0-0.5	4	68	19	34.52287444180	-82.99163878430
	0-0.5	5	110	22	34.52288575340	-82.99158179680
AA4	0-0.5	1	643	41	34.52311981810	-82.99172150100
	0-0.5	2	130	18	34.52306931560	-82.99169268260
	0-0.5	3	1,288	54	34.52315974510	-82.99171821610
	0-0.5	4	108	25	34.52310154010	-82.99175506260
	0-0.5	5	525	48	34.52305771890	-82.99174206360
AA5	0-0.5	1	744	57	34.52318064820	-82.99162696670
	0-0.5	2	147	20	34.52320967610	-82.99159087480
	0-0.5	3	171	34	34.52323527400	-82.99163805340
	0-0.5	4	281	32	34.52315438800	-82.99167064890
	0-0.5	5	247	40	34.52314972650	-82.99158394140
Z2	0-0.5	1	73	23	34.52304686890	-82.99199673910
	0-0.5	2	145	25	34.52305868570	-82.99204397130
	0-0.5	3	160	25	34.52307898620	-82.99199713070
	0-0.5	4	261	21	34.52303311550	-82.99195382720
	0-0.5	5	156	24	34.52300255720	-82.99201114760

Notes:

FBGS – feet below ground surface
NA – not applicable – sample was not sent to the laboratory
ppm – parts per million
XRF – X-ray refraction
Results that are shaded are above the USEPA Removal Action Level for lead in residential soil (400 ppm).

WELCH GROUP ENVIRONMENTAL
REMOVAL SITE INVESTIGATION
FAIR PLAY, OCONEE COUNTY, SOUTH CAROLINA
XRF SCREENING RESULTS OF MISCELLANEOUS ITEMS

Reading No	Time	Type	SAMPLE	LOCATION	GRID LOCATIONS	Pb	+/- Error	Units
CONCRETE BLOCKS AND CURBING								
2	02/01/11	CONCRETE BLOCKS	AA9-BLOCK	DOWN GRADIENT OF SMELTING OPERATIONS	AA9	257	32	ppm
3	02/01/11	CONCRETE BLOCKS	AB9-BLOCK	DOWN GRADIENT OF SMELTING OPERATIONS	AB9	122	25	ppm
4	02/01/11	CONCRETE BLOCKS	AB9-BLOCK2	DOWN GRADIENT OF SMELTING OPERATIONS	AB9	191	31	ppm
5	02/01/11	CONCRETE BLOCKS	AC10-BLOCK	DOWN GRADIENT OF SMELTING OPERATIONS	AC10	76	30	ppm
6	02/01/11	CONCRETE BLOCKS	AC9-BLOCK	DOWN GRADIENT OF SMELTING OPERATIONS	AC9	252	58	ppm
7	02/01/11	CONCRETE BLOCKS	AC9-BLOCK2	DOWN GRADIENT OF SMELTING OPERATIONS	AC9	95	28	ppm
8	02/01/11	CONCRETE BLOCKS	AC10-BLOCK2	DOWN GRADIENT OF SMELTING OPERATIONS	AC10	48	22	ppm
9	02/01/11	CONCRETE BLOCKS	AC10-BLOCK3	DOWN GRADIENT OF SMELTING OPERATIONS	AC10	452	46	ppm
10	02/01/11	CONCRETE BLOCKS	AC11-BLOCK	DOWN GRADIENT OF SMELTING OPERATIONS	AC11	107	24	ppm
11	02/01/11	CONCRETE BLOCKS	AC11-BLOCK2	DOWN GRADIENT OF SMELTING OPERATIONS	AC11	438	45	ppm
12	02/01/11	CONCRETE BLOCKS	AB12-BLOCK	DOWN GRADIENT OF SMELTING OPERATIONS	AB12	3,359	111	ppm
13	02/01/11	CONCRETE BLOCKS	AB11-BLOCK	DOWN GRADIENT OF SMELTING OPERATIONS	AB11	1,080	59	ppm
14	02/01/11	CONCRETE BLOCKS	AB11-BLOCK2	DOWN GRADIENT OF SMELTING OPERATIONS	AB11	14,364	221	ppm
15	02/01/11	CONCRETE BLOCKS	AC-10-BLOCK4	DOWN GRADIENT OF SMELTING OPERATIONS	AC10	70	21	ppm
16	02/01/11	CONCRETE BLOCKS	BLOCK20	DOWN GRADIENT OF SMELTING OPERATIONS	AB10	390	52	ppm
17	02/01/11	CONCRETE BLOCKS	AE6-PILE1	DOWN GRADIENT OF SMELTING OPERATIONS	AE6	9,439	163	ppm
18	02/01/11	CONCRETE BLOCKS	AC3-PILE1	DOWN GRADIENT OF SMELTING OPERATIONS	AC3	2,453	75	ppm
21	02/03/11	CONCRETE BLOCKS	BLOCK PILE1	DOWN GRADIENT OF SMELTING OPERATIONS	AB9	3,849	157	ppm
22	02/03/11	CONCRETE BLOCKS	BLOCK PILE1-2	TOP RIGHT CORNER	AB9	6,242	230	ppm
23	02/03/11	CONCRETE BLOCKS	BLOCK PILE1-3	TOP LEFT CORNER	AB9	332	33	ppm
24	02/03/11	CONCRETE BLOCKS	BLOCK PILE1-4	BOTTOM RIGHT CORNER	AB9	983	94	ppm
25	02/03/11	CONCRETE BLOCKS	BLOCK PILE2-1	TOP RIGHT CORNER	AB10	666	74	ppm
26	02/03/11	CONCRETE BLOCKS	BLOCK PILE2-2	TOP LEFT CORNER	AB10	1,068	97	ppm
27	02/03/11	CONCRETE BLOCKS	BLOCK PILE2-3	BOTTOM RIGHT CORNER	AB10	1,337	96	ppm
28	02/03/11	CONCRETE BLOCKS	BLOCK PILE2-4	BOTTOM LEFT CORNER	AB10	1,923	116	ppm
29	02/03/11	CONCRETE BLOCKS	BLOCK PILE3-1	TOP RIGHT CORNER	AC10	488	60	ppm
30	02/03/11	CONCRETE BLOCKS	BLOCK PILE3-2	TOP LEFT CORNER	AC10	268	50	ppm
31	02/03/11	CONCRETE BLOCKS	BLOCK PILE3-3	BOTTOM RIGHT CORNER	AC10	443	60	ppm
32	02/03/11	CONCRETE BLOCKS	BLOCK PILE3-4	BOTTOM LEFT CORNER	AC10	800	73	ppm
33	02/03/11	CONCRETE BLOCKS	BLOCK PILE4-1	TOP RIGHT CORNER	AC11	74	32	ppm
34	02/03/11	CONCRETE	CONCRETE CURBING	TOP RIGHT CORNER	AB11	4,785	176	ppm
35	02/03/11	CONCRETE	CONCRETE CURBING	TOP RIGHT CORNER	AC11	5,157	176	ppm
36	02/03/11	CONCRETE	CONCRETE CURBING-2	TOP LEFT CORNER	AC11	1,099	90	ppm
37	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS	TOP LEFT CORNER	AC11	144	37	ppm
38	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS5-2	TOP R CNR	AD10	269	41	ppm
39	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS5-3	BOTTOM RIGHT CORNER	AD10	2,499	104	ppm

WELCH GROUP ENVIRONMENTAL
REMOVAL SITE INVESTIGATION
FAIR PLAY, OCONEE COUNTY, SOUTH CAROLINA
XRF SCREENING RESULTS OF MISCELLANEOUS ITEMS

Reading No	Time	Type	SAMPLE	LOCATION	GRID LOCATIONS	Pb	+/- Error	Units
40	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS5-4	BOTTOM LEFT CORNER	AD10	2,055	108	ppm
41	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS ON HILL	Y-1	Y1	1,812	89	ppm
42	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS ON HILL	Y-2	Y1	112	35	ppm
43	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS ON HILL	Y-3	Y1	2,519	170	ppm
44	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS ON HILL	Y-4	Y1	94	41	ppm
45	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS 6	BOTTOM CORNER	Y1	1,229	87	ppm
46	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS 7	BOTTOM CORNER	AD10	608	63	ppm
47	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS 8	BOTTOM CORNER	AD10	2,679	143	ppm
48	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS 9	BOTTOM CORNER	AD10	482	70	ppm
49	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS 10	BOTTOM CORNER	AD11	1,031	89	ppm
50	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS 10-2	BOTTOM CORNER	AD11	1,585	101	ppm
51	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS 11	BOTTOM CORNER	AD11	285	49	ppm
52	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS 11-2	BOTTOM CORNER	AD11	113	33	ppm
53	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS 12-1	BOTTOM CORNER	AD11	188	37	ppm
54	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS 13-1	BOTTOM CORNER	AC12	110	31	ppm
55	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS 14	BOTTOM CORNER	AC12	143	35	ppm
56	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS 15	BOTTOM CORNER	AC12	352	66	ppm
57	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS 16	BOTTOM CORNER	AC12	1,204	92	ppm
58	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS 17	BOTTOM CORNER	AB12	1,265	88	ppm
59	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS 17-1	BOTTOM CORNER	AB12	138	31	ppm
60	02/03/11	CONCRETE BLOCKS	CINDER BLOCKS 17-2	BOTTOM CORNER	AB12	6,537	170	ppm
61	02/03/11	CONCRETE BLOCKS	BLOCKS -17	TOP LEFT CORNER	AB12	299	57	ppm
62	02/03/11	CONCRETE BLOCKS	BLOCKS -18-2	BOTTOM RIGHT CORNER	AB12	118	48	ppm
63	02/03/11	CONCRETE BLOCKS	BLOCKS -19	TOP LEFT CORNER	AB12	119	32	ppm
64	02/03/11	CONCRETE BLOCKS	BLOCKS -20	TOP LEFT CORNER	AB12	1,675	87	ppm
65	02/03/11	CONCRETE BLOCKS	BLOCKS -20	BOTTOM RIGHT CORNER	AA11	421	63	ppm
68	02/03/11	CONCRETE BLOCKS	BLOCKS 21	TOP LEFT CORNER	AA11	594	96	ppm
69	02/03/11	CONCRETE BLOCKS	BLOCKS 21	BOTTOM RIGHT CORNER	AA11	228	57	ppm
75	02/03/11	CONCRETE BLOCKS	BLOCKS 22	TOP	AA11	1,210	96	ppm
76	02/03/11	CONCRETE BLOCKS	BLOCKS 23	TOP	AA11	906	91	ppm
77	02/03/11	CONCRETE BLOCKS	BLOCKS 24	TOP	AA11	616	71	ppm
78	02/03/11	CONCRETE BLOCKS	BLOCKS 24	BOTTOM	AA11	184	50	ppm
79	02/03/11	CONCRETE BLOCKS	BLOCKS 26	TOP	AA10	235	51	ppm

WELCH GROUP ENVIRONMENTAL
REMOVAL SITE INVESTIGATION
FAIR PLAY, OCONEE COUNTY, SOUTH CAROLINA
XRF SCREENING RESULTS OF MISCELLANEOUS ITEMS

Reading No	Time	Type	SAMPLE	LOCATION	GRID LOCATIONS	Pb	+/- Error	Units
80	02/03/11	CONCRETE BLOCKS	BLOCKS 27	TOP	AA10	157	55	ppm
81	02/03/11	CONCRETE BLOCKS	BLOCKS 28	TOP	AA10	630	81	ppm
82	02/03/11	CONCRETE BLOCKS	BLOCKS 29	TOP	AA10	1,305	123	ppm
83	02/03/11	CONCRETE BLOCKS	BLOCKS 29	BOTTOM	AA10	968	99	ppm
84	02/03/11	CONCRETE BLOCKS	BLOCKS 30	TOP	AA10	219	48	ppm
85	02/03/11	CONCRETE BLOCKS	BLOCKS 31	TOP	AA10	161	51	ppm
86	02/03/11	CONCRETE BLOCKS	BLOCKS 31	BOTTOM	AA10	780	91	ppm
87	02/03/11	CONCRETE BLOCKS	BLOCKS 32	TOP	AB11	432	64	ppm
88	02/03/11	CONCRETE BLOCKS	BLOCKS 33	TOP	AB11	704	108	ppm
89	02/03/11	CONCRETE BLOCKS	BLOCKS 34	TOP	AB11	477	47	ppm
90	02/03/11	CONCRETE BLOCKS	BLOCKS 34	BOTTOM	AB11	916	91	ppm
91	02/03/11	CONCRETE BLOCKS	BLOCKS 35	TOP	AB11	77	25	ppm
92	02/03/11	CONCRETE BLOCKS	BLOCKS 36	TOP	AB11	158	47	ppm
93	02/03/11	CONCRETE BLOCKS	BLOCKS 37	TOP	AC12	1,104	104	ppm
94	02/03/11	CONCRETE BLOCKS	BLOCKS 38	TOP	AC12	346	57	ppm
95	02/03/11	CONCRETE BLOCKS	BLOCKS 39	TOP	AC12	125	36	ppm
96	02/03/11	CONCRETE BLOCKS	BLOCKS 40	TOP	AC12	612	86	ppm
97	02/03/11	CONCRETE BLOCKS	BLOCKS 41	TOP	AC12	5,689	243	ppm
98	02/03/11	CONCRETE BLOCKS	BLOCKS 42	TOP	AA9	190	42	ppm
99	02/03/11	CONCRETE BLOCKS	BLOCKS 43	TOP	AA9	327	50	ppm
100	02/03/11	CONCRETE BLOCKS	BLOCKS 44	TOP	AA9	1,706	99	ppm
101	02/03/11	CONCRETE BLOCKS	BLOCKS 45	TOP	AA9	589	68	ppm
102	02/03/11	CONCRETE BLOCKS	BLOCKS 47	TOP	AA9	167	40	ppm
VEHICLES								
1	02/08/11	VEHICLES	ISUZU PUP - CREAM - 1	UP-GRADIENT OF THE SMETLER BUILDING	Y1	7,664	560	ppm
2	02/08/11	VEHICLES	ISUZU PUP - CREAM - 2	UP-GRADIENT OF THE SMETLER BUILDING	Y1	13,689	687	ppm
3	02/08/11	VEHICLES	ISUZU PUP - BLACK	UP-GRADIENT OF THE SMETLER BUILDING	Y1	14,184	712	ppm
4	02/08/11	VEHICLES	ISUZU PUP - BLACK	UP-GRADIENT OF THE SMETLER BUILDING	Y1	10,102	499	ppm
5	02/08/11	VEHICLES	DODGE RAM 2500 -BLACK-RED	UP-GRADIENT OF THE SMETLER BUILDING	Z1	3,331	247	ppm
6	02/08/11	VEHICLES	DODGE RAM 2500 - BLACK-RED 2	UP-GRADIENT OF THE SMETLER BUILDING	Z1	696	109	ppm
7	02/08/11	VEHICLES	CHEVY-10 - BLUE	UP-GRADIENT OF THE SMETLER BUILDING	Z1	7,258	448	ppm
8	02/08/11	VEHICLES	CHEVY-10 - BLUE	UP-GRADIENT OF THE SMETLER BUILDING	Z1	15,816	757	ppm
9	02/09/11	VEHICLES	2011 DODGE	TEST	Y1	< LOD	40	ppm
10	02/09/11	VEHICLES	2011 DODGE	TEST - DIRTY SPOT	Y1	< LOD	37	ppm
11	02/09/11	VEHICLES	ISUZU PUP - CREAM	CLEAN SPOT	Y1	5,704	632	ppm
13	02/09/11	VEHICLES	ISUZU PUP - CREAM	CLEAN SPOT2	Y1	5,814	649	ppm
14	02/09/11	VEHICLES	ISUZU PUP - CREAM	SEAT	Y1	400	73	ppm
15	02/09/11	VEHICLES	DODGE RAM 2500 - BLACK-RED	SEAT	Z1	487	79	ppm
16	02/08/11	VEHICLES	TRUCK - MACK	UP-GRADIENT OF THE SMETLER BUILDING	AD11	17,769	1,009	ppm

WELCH GROUP ENVIRONMENTAL
REMOVAL SITE INVESTIGATION
FAIR PLAY, OCONEE COUNTY, SOUTH CAROLINA
XRF SCREENING RESULTS OF MISCELLANEOUS ITEMS

Reading No	Time	Type	SAMPLE	LOCATION	GRID LOCATIONS	Pb	+/- Error	Units
EQUIPMENT								
1	02/03/11	EQUIPMENT	TRAILER - 1	EAST OF THE PROPERTY	AD11	8,839	161	ppm
2	02/03/11	EQUIPMENT	TRAILER - 2	EAST OF THE PROPERTY	AD11	11,465	221	ppm
3	02/03/11	EQUIPMENT	SNAPPER TRAILER - 1	EAST OF THE PROPERTY	AE10	< LOD	39	ppm
4	02/03/11	EQUIPMENT	SNAPPER TRAILER TIRES - 1	EAST OF THE PROPERTY	AE10	628	35	ppm
5	02/03/11	EQUIPMENT	SNAPPER TRAILER TIRES - 2	EAST OF THE PROPERTY	AE10	689	42	ppm
6	02/08/11	EQUIPMENT	TRACTOR TIRES	BEHIND VEHICLES UP-GRADIENT OF THE SMETLER BUILDING	Z1	840	31	ppm
7	02/08/11	EQUIPMENT	FORKLIFT (J&H RENTAL)	UP-GRADIENT OF THE SMETLER BUILDING	AA1	2,971	270	ppm
8	02/08/11	EQUIPMENT	FORKLIFT (AMERICAN EQUIP CO.)	UP-GRADIENT OF THE SMETLER BUILDING	AA1	83,886	1,981	ppm
9	02/08/11	EQUIPMENT	FORKLIFT (PETTIBONE B66)	UP-GRADIENT OF THE SMETLER BUILDING	AA1	377,332	4,365	ppm
10	02/08/11	EQUIPMENT	FORD BOOM TRUCK (WHITE - J&H RENTAL)	UP-GRADIENT OF THE SMETLER BUILDING	AB1	355	39	ppm
11	02/08/11	EQUIPMENT	TRACTOR (CASE AGRI-KING)	UP-GRADIENT OF THE SMETLER BUILDING	AB1	64,338	1,618	ppm
12	02/08/11	EQUIPMENT	TRACTOR (ALLIS-CHALMERS)	UP-GRADIENT OF THE SMETLER BUILDING	AB5	12,238,386	113,325	ppm
13	02/09/11	EQUIPMENT	TAG ALONG CRANE	UP-GRADIENT OF THE SMETLER BUILDING	AC5	6,344	521	ppm
14	02/09/11	EQUIPMENT	MIXER - 1	UP-GRADIENT OF THE SMETLER BUILDING	AC5	90,942	2,985	ppm
15	02/09/11	EQUIPMENT	MIXER - 2	UP-GRADIENT OF THE SMETLER BUILDING	AC5	25,436	1,247	ppm
16	02/09/11	EQUIPMENT	MIXER - 3	UP-GRADIENT OF THE SMETLER BUILDING	AA6	118,114	2,513	ppm
17	02/09/11	EQUIPMENT	SEMI TRAILER	BEHIND SMETLER BUILDING	AA6	965,643	11,002	ppm
18	02/09/11	EQUIPMENT	CARGO BOX	BEHIND SMETLER BUILDING	AA6	278,483	4,704	ppm
19	02/09/11	EQUIPMENT	DOZER	BEHIND SMETLER BUILDING	Z6	31,500	1,729	ppm
20	02/09/11	EQUIPMENT	BOAT TRAILER	BEHIND SMETLER BUILDING	Z5	8,839	185	ppm
21	02/09/11	EQUIPMENT	GOOSE NECK TRAILER	BEHIND SMETLER BUILDING	Z4	102,124	3,130	ppm
22	02/09/11	EQUIPMENT	SEMI-TRUCK	BEHIND SMETLER BUILDING	Z6	23	14	ppm
23	02/09/11	EQUIPMENT	TRAILER	BEHIND SMETLER BUILDING	Y4	2,371	81	ppm
24	02/09/11	EQUIPMENT	BOAT	BEHIND SMETLER BUILDING	X4	1,007	68	ppm
25	02/09/11	EQUIPMENT	STEEL BOX	BEHIND SMETLER BUILDING	Z4	56,262	2,040	ppm
26	02/10/11	EQUIPMENT	TRACKHOE - TRACKS	BEHIND SMETLER BUILDING	Z4	2,478	119	ppm
27	02/10/11	EQUIPMENT	TRACKHOE - BODY	BEHIND SMETLER BUILDING	Z1	15,762	503	ppm
METAL								
1	02/08/11	METAL	SCRAP IRON	UP-GRADIENT OF THE SMETLER BUILDING	AB3	6,695	484	ppm
2	02/09/11	METAL	SCRAP IRON -1	UP-GRADIENT OF THE SMETLER BUILDING	AB3	14,039	694	ppm
3	02/09/11	METAL	SCRAP IRON - 2	UP-GRADIENT OF THE SMETLER BUILDING	AB3	10,208	5,884	ppm
4	02/09/11	METAL	SCRAP IRON - 2	UP-GRADIENT OF THE SMETLER BUILDING	AB4	29,483	1,430	ppm
5	02/09/11	METAL	SCRAP IRON - 3	UP-GRADIENT OF THE SMETLER BUILDING	AB4	6,992	1,100	ppm
6	02/09/11	METAL	SCRAP IRON - 4	UP-GRADIENT OF THE SMETLER BUILDING	AB4	26,771	1,176	ppm
7	02/09/11	METAL	SCRAP IRON - 5	UP-GRADIENT OF THE SMETLER BUILDING	AB3	4,118	542	ppm
8	02/09/11	METAL	METAL HOPPER	UP-GRADIENT OF THE SMETLER BUILDING	AB3	9,802	925	ppm
9	02/09/11	METAL	METAL TANK	UP-GRADIENT OF THE SMETLER BUILDING	AB3	272	135	ppm
10	02/09/11	METAL	STEEL FRAME	UP-GRADIENT OF THE SMETLER BUILDING	AF9	23,506	1,389	ppm

WELCH GROUP ENVIRONMENTAL
REMOVAL SITE INVESTIGATION
FAIR PLAY, OCONEE COUNTY, SOUTH CAROLINA
XRF SCREENING RESULTS OF MISCELLANEOUS ITEMS

Reading No	Time	Type	SAMPLE	LOCATION	GRID LOCATIONS	Pb	+/- Error	Units
DEBRIS								
1	02/03/11	DEBRIS	KILN PILE - 1	SOUTHEAST OF THE PROPERTY	AF11	301,889	3,758	ppm
2	02/03/11	DEBRIS	KILN PILE - 2	SOUTHEAST OF THE PROPERTY	Y4	30,091	523	ppm
TANK								
1	02/09/11	TANK	HEATING OIL TANK	UP-GRADIENT OF THE SMETLER BUILDING	AA8	5,963	467	ppm
DRUM								
1	02/03/11	STEEL	DRUM	LOCATED INSIDE SMELTING BUILDING	Y2	999,689	9,936	ppm
WOOD								
1	02/08/11	WOOD	WOODEN PALLETS	BEHIND VEHICLES UP-GRADIENT OF THE SMETLER BUILDING	Y1	28	11	ppm

NOTES

Pb = Lead

ppm = parts per million

Results that are shaded are above the USEPA Removal Action Level for lead (400 ppm).

TABLE 1
WELCH GROUP ENVIRONMENTAL
REMOVAL SITE INVESTIGATION
FAIR PLAY, OCONEE COUNTY, SOUTH CAROLINA
SUMMARY OF THE LABORATORY RESULTS FOR THE SOIL SAMPLING LOCATIONS
FEBRUARY 1 3, 2011

Sample Identification	**Region 4 RSL (Residential Soil)**	**Region 4 RSL (Industrial Soil)**	Smelting Building Floor Sample		FP01-AA10 (0-6)		AA10-100		FP02-AB10 (0-6)	
Sample Depth (fbgs)			Surface		0.5		0.5		0.5	
Collection Date			2/3/2011		2/1/2011		2/1/2011		2/1/2011	
Matrix			Surface		Suface Soil		Suface Soil		Suface Soil	
Sample Type			Field Sample		Field Sample		Duplicate Sample		Field Sample	
Metals, Total (mg/kg)										
Aluminum	77000	990000	18.7	B	14900		NA		NA	
Antimony	31	410	**14500**		25.2		NA		NA	
Arsenic	0.39	1.60	**2200**		**16**		NA		NA	
Barium	15000	190000	7.98		64.8		NA		NA	
Beryllium	160	2000	0.027	U	0.37		NA		NA	
Cadmium	70	800	0.097	U	0.38		NA		NA	
Calcium	NL	NL	81	B	3150		NA		NA	
Chromium	120000	1500000	0.12	U	25.5		NA		NA	
Cobalt	23	300	0.22	U	6.28		NA		NA	
Copper	3100	41000	**23100**		199		NA		NA	
Iron	55000	720000	541		13800		NA		NA	
Lead	400	1200	**72300**		**5160**		**2570**		**6830**	
Magnesium	NL	NL	23.9		860		NA		NA	
Manganese	1800	23000	7.19		721		NA		NA	
Nickel	1500	20000	8.19		6.12		NA		NA	
Potassium	NL	NL	18.1	U	492		NA		NA	
Selenium	390	5100	4.01		0.22	U	NA		NA	
Silver	390	5100	32.1		0.041	U	NA		NA	
Sodium	NL	NL	34.8	U	26.2	B	NA		NA	
Thallium	NL	NL	1.36		0.4	B	NA		NA	
Vanadium	390	5200	0.49	U	39.7		NA		NA	
Zinc	23000	310000	210		79.3		NA		NA	
Mercury	5.6	34	0.0034	U	0.031		NA		NA	

Notes:
FP - Fair Play
RSL - Regional Screening Level
bold - Concentration exceeds the RSL for residential/industrial soil.
U - Analyte was not detected above the associated value.
B - Analyte was found in the method blank sample.

mg/kg - Milligrams per kilogram
fbgs - Feet below ground surface
NL - Not listed
NA - Not analyzed

TABLE 1
WELCH GROUP ENVIRONMENTAL
REMOVAL SITE INVESTIGATION
FAIR PLAY, OCONEE COUNTY, SOUTH CAROLINA
SUMMARY OF THE LABORATORY RESULTS FOR THE SOIL SAMPLING LOCATIONS
FEBRUARY 1 3, 2011

Sample Identification	Region 4 RSL (Residential Soil)	Region 4 RSL (Industrial Soil)	FP03-AB11 (0-6)		FP04-AC11 (0-6)		FP05-AC10 (0-6)		FP06-AA9 (0-6)		AA9-101	
Sample Depth (fbgs)			0.5		0.5		0.5		0.5		0.5	
Collection Date			2/1/2011		2/2/2011		2/1/2011		2/1/2011		2/1/2011	
Matrix			Suface Soil		Suface Soil		Suface Soil		Suface Soil		Suface Soil	
Sample Type			Field Sample		Field Sample		Field Sample		Field Sample		Duplicate Sample	
Metals, Total (mg/kg)												
Aluminum	77000	990000	16600		NA		NA		6280		5290	
Antimony	31	410	7.88		NA		NA		**629**		**883**	
Arsenic	0.39	1.60	**7.0**		NA		NA		**72.4**		**91.8**	
Barium	15000	190000	68.7		NA		NA		70.6		49.4	
Beryllium	160	2000	0.42		NA		NA		0.049	B	0.016	U
Cadmium	70	800	0.33		NA		NA		0.63		0.13	B
Calcium	NL	NL	1720		NA		NA		1280		1200	
Chromium	120000	1500000	22.5		NA		NA		12		11.5	
Cobalt	23	300	8.08		NA		NA		3.07		2.83	
Copper	3100	41000	95.7		NA		NA		2980		**10500**	
Iron	55000	720000	15500		NA		NA		6460		7070	
Lead	400	1200	**1540**		**2120**		**1840**		**33200**		**28800**	
Magnesium	NL	NL	531		NA		NA		423		315	
Manganese	1800	23000	873		NA		NA		302		340	
Nickel	1500	20000	5.68		NA		NA		3.62		4.43	B
Potassium	NL	NL	644		NA		NA		336		246	
Selenium	390	5100	0.23	U	NA		NA		0.35	B	1.1	B
Silver	390	5100	0.042	U	NA		NA		1.87		2.04	B
Sodium	NL	NL	16.2	B	NA		NA		25.6	B	19.7	U
Thallium	NL	NL	0.26	B	NA		NA		0.11	U	0.56	U
Vanadium	390	5200	46		NA		NA		17		19.5	
Zinc	23000	310000	56.5		NA		NA		85.2		331	
Mercury	5.6	34	0.04[illegible]		NA		NA		0.039		0.014	

Notes:
FP - Fair Play
RSL - Regional Screening Level
bold - Concentration exceeds the RSL for residential/industrial soil.
U - Analyte was not detected above the associated value.
B - Analyte was found in the method blank sample.

TABLE 1
WELCH GROUP ENVIRONMENTAL
REMOVAL SITE INVESTIGATION
FAIR PLAY, OCONEE COUNTY, SOUTH CAROLINA
SUMMARY OF THE LABORATORY RESULTS FOR THE SOIL SAMPLING LOCATIONS
FEBRUARY 1 3, 2011

Sample Identification	**Region 4 RSL (Residential Soil)**	**Region 4 RSL (Industrial Soil)**	FP07-AB9 (0-6)		FP08-Z7 (0-6)		FP09-AB7 (0-6)		FP10-AE9 (0-6)		FP11-AE10 (0-6)	
Sample Depth (fbgs)			0.5		0.5		0.5		0.5		0.5	
Collection Date			2/1/2011		2/1/2011		2/1/2011		2/3/2011		2/3/2011	
Matrix			Suface Soil		Suface Soil		Suface Soil		Suface Soil		Suface Soil	
Sample Type			Field Sample		Field Sample		Field Sample		Field Sample		Field Sample	
Metals, Total (mg/kg)												
Aluminum	77000	990000	NA		11200		NA		12100		NA	
Antimony	31	410	NA		**1280**		NA		8.54		NA	
Arsenic	0.39	1.60	NA		**67.1**		NA		**4.7**		NA	
Barium	15000	190000	NA		66.3		NA		35.7		NA	
Beryllium	160	2000	NA		0.36		NA		0.25		NA	
Cadmium	70	800	NA		0.33		NA		0.11	B	NA	
Calcium	NL	NL	NA		25500		NA		345		NA	
Chromium	120000	1500000	NA		14.4		NA		19.4		NA	
Cobalt	23	300	NA		2.73		NA		3.2		NA	
Copper	3100	41000	NA		1740		NA		46.9		NA	
Iron	55000	720000	NA		14800		NA		12100		NA	
Lead	400	1200	**16800**		**45400**		**65000**		**2090**		89.6	
Magnesium	NL	NL	NA		1390		NA		170		NA	
Manganese	1800	23000	NA		364		NA		362		NA	
Nickel	1500	20000	NA		10.5		NA		3.18		NA	
Potassium	NL	NL	NA		999		NA		189		NA	
Selenium	390	5100	NA		1.3	B	NA		0.23	U	NA	
Silver	390	5100	NA		4.59		NA		0.041	U	NA	
Sodium	NL	NL	NA		164		NA		4.83	B	NA	
Thallium	NL	NL	NA		3.06		NA		0.23	B	NA	
Vanadium	390	5200	NA		21		NA		30.6		NA	
Zinc	23000	310000	NA		177		NA		27.9		NA	
Mercury	5.6	34	NA		0.032		NA		0.02		NA	

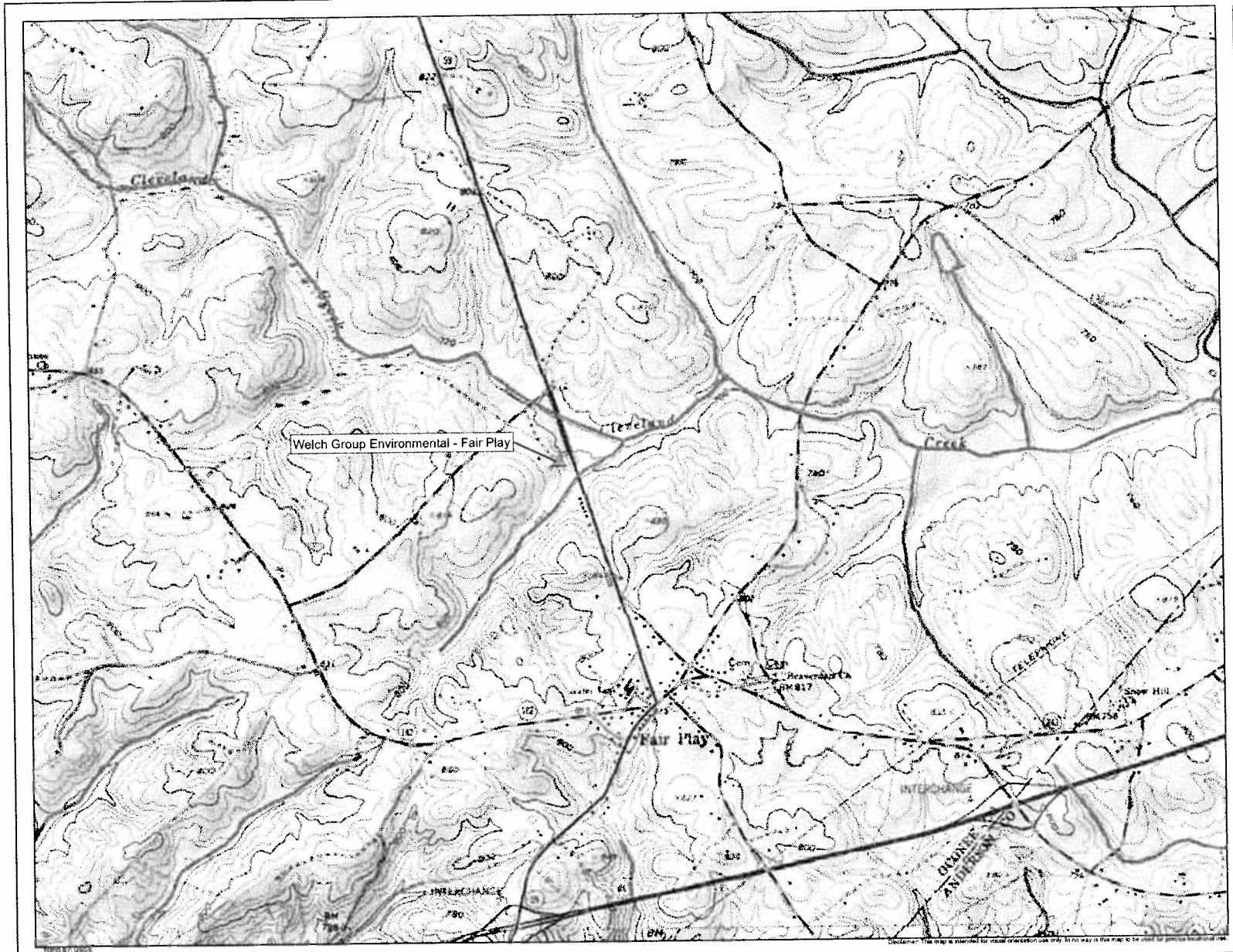
Notes:
FP - Fair Play
RSL - Regional Screening Level
bold - Concentration exceeds the RSL for residential/industrial soil.
U - Analyte was not detected above the associated value.
B - Analyte was found in the method blank sample.

TABLE 1
WELCH GROUP ENVIRONMENTAL
REMOVAL SITE INVESTIGATION
FAIR PLAY, OCONEE COUNTY, SOUTH CAROLINA
SUMMARY OF THE LABORATORY RESULTS FOR THE SOIL SAMPLING LOCATIONS
FEBRUARY 1 3, 2011

Sample Identification	**Region 4 RSL (Residential Soil)**	**Region 4 RSL (Industrial Soil)**	Isuzu Pup (Door Panel) Cream		Isuzu Pup (Cream) - Hood		Chevy - Blue/White	
Sample Depth (fbgs)			Upgradient of Smelting Building		Upgradient of Smelting Building		Upgradient of Smelting Building	
Collection Date			2/17/2011		2/17/2011		2/17/2011	
Matrix			Paint Samples		Paint Samples		Paint Samples	
Sample Type			Field Sample		Field Sample		Field Sample	
Metals, Total (mg/kg)								
Aluminum	77000	990000	NA		NA		NA	
Antimony	31	410	NA		NA		NA	
Arsenic	0.39	1.60	NA		NA		NA	
Barium	15000	190000	NA		NA		NA	
Beryllium	160	2000	NA		NA		NA	
Cadmium	70	800	NA		NA		NA	
Calcium	NL	NL	NA		NA		NA	
Chromium	120000	1500000	NA		NA		NA	
Cobalt	23	300	NA		NA		NA	
Copper	3100	41000	NA		NA		NA	
Iron	55000	720000	NA		NA		NA	
Lead	400	1200	**1470**		**1930**		**5610**	
Magnesium	NL	NL	NA		NA		NA	
Manganese	1800	23000	NA		NA		NA	
Nickel	1500	20000	NA		NA		NA	
Potassium	NL	NL	NA		NA		NA	
Selenium	390	5100	NA		NA		NA	
Silver	390	5100	NA		NA		NA	
Sodium	NL	NL	NA		NA		NA	
Thallium	NL	NL	NA		NA		NA	
Vanadium	390	5200	NA		NA		NA	
Zinc	23000	310000	NA		NA		NA	
Mercury	5.6	34	NA		NA		NA	

Notes:
FP - Fair Play
RSL - Regional Screening Level
bold - Concentration exceeds the RSL for residential/industrial soil.
U - Analyte was not detected above the associated value.
B - Analyte was found in the method blank sample.

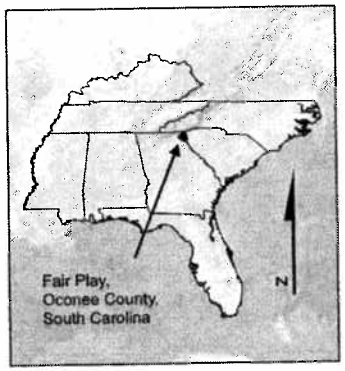
ATTACHMENT C
Figures



Legend

▲ Site Location

Feet
0 1,500 3,000

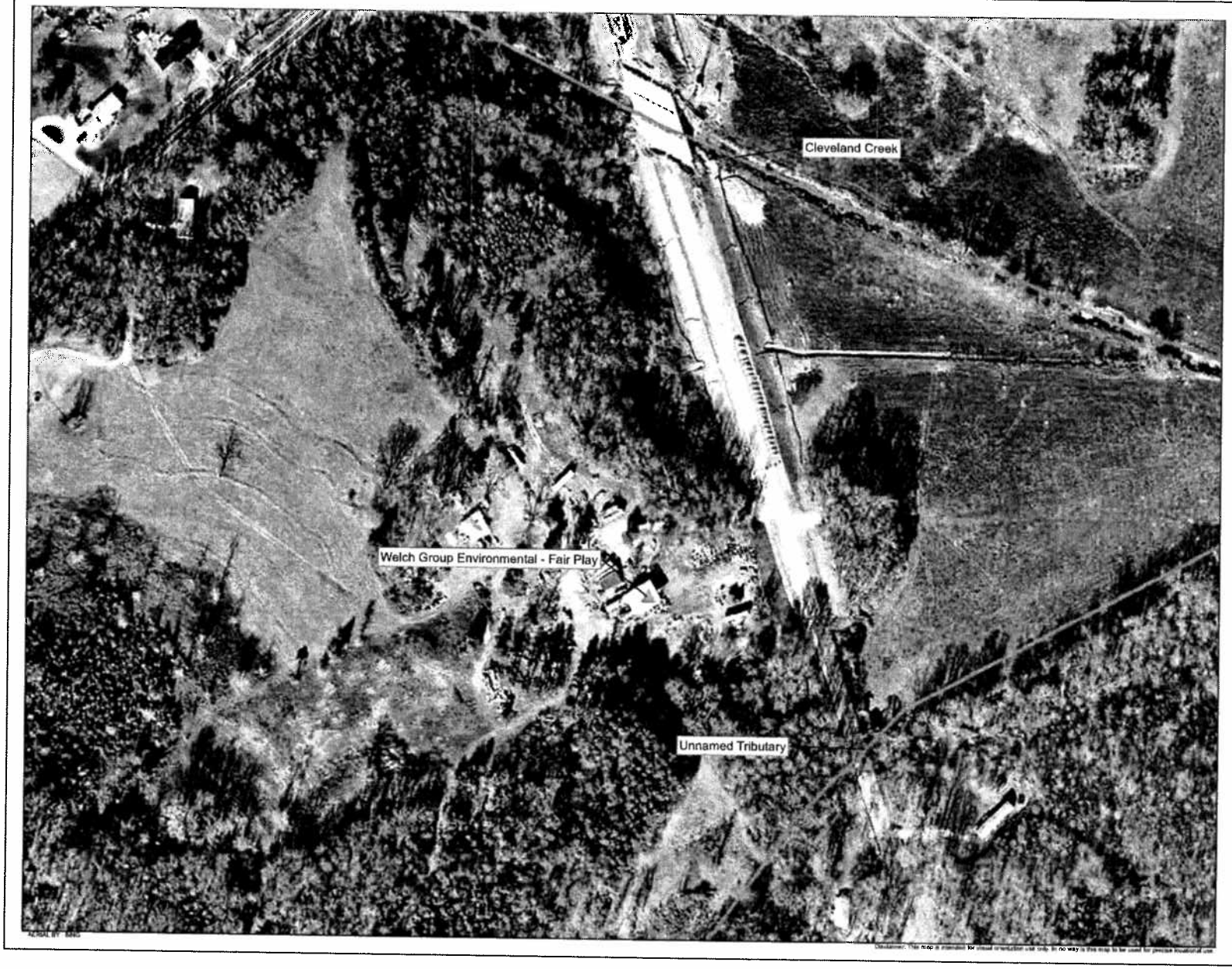


WELCH GROUP ENVIRONMENTAL
FAIR PLAY,
OCONEE COUNTY,
SOUTH CAROLINA
TDD NO. TNA-05-003-0122

FIGURE 1
TOPOGRAPHICAL MAP

United States Environmental Protection Agency

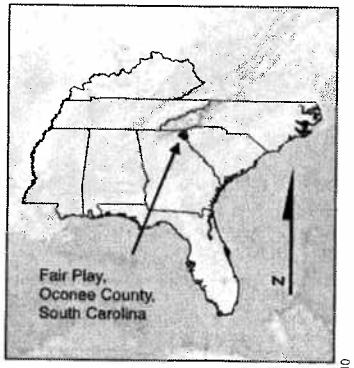
E:\GIS Workspace\Welch Environmental 1306\Mapping\Fairplay_1310



Legend

Sile Location

Feet
0 150 300



WELCH GROUP ENVIRONMENTAL
FAIR PLAY,
OCONEE COUNTY,
SOUTH CAROLINA
TDD NO. TNA-05-003-0122

FIGURE 2
AERIAL MAP

United States Environmental Protection Agency

OTIE

E:\GIS Workspace\Welch Environmental 1306\Mapping\Fairplay_1310

Legend

Welch - Fair Play Parcel

Sample Grid

Below 400 ppm (EPA)

Above 400 ppm (EPA)

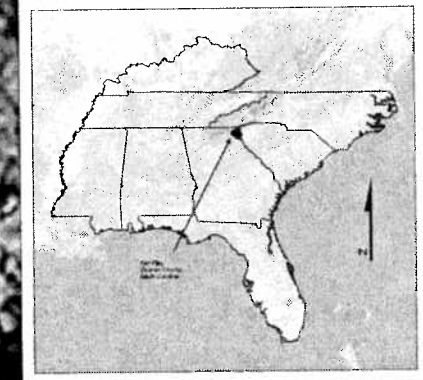
Note:
EPA - Environmental Protection Agency
XRF - X-ray fluorescence

The XRF reading are in ppm (parts per million) and are for Lead.

400 ppm is the Federal and State Lead cleanup number for unrestricted land use.

Feet

0 75 150



WELCH GROUP ENVIRONMENTAL
FAIR PLAY,
OCONEE COUNTY,
SOUTH CAROLINA
TDD NO. TNA-05-003-0122

FIGURE 3
SURFACE SOIL
XRF RESULTS MAP

United States Environmental Protection Agency

Legend

Welch - Fair Play Parcel

Sample Grid

Below 400 ppm (EPA)

Above 400 ppm (EPA)

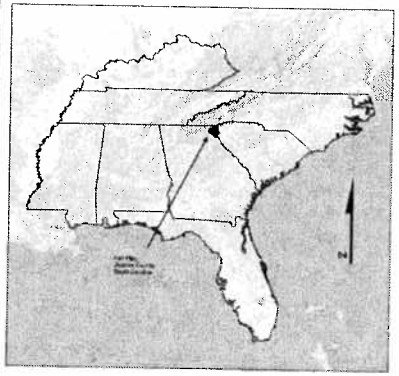
Note:
XRF - X-ray fluorescence

The XRF reading are in ppm (parts per million) and are for Lead.

400 ppm is the Federal and State Lead cleanup number for unrestricted land use.

Feet

0 75 150



WELCH GROUP ENVIRONMENTAL
FAIR PLAY,
OCONEE COUNTY,
SOUTH CAROLINA
TDD NO. TNA-05-003-0122

FIGURE 4
MISCELLANEOUS DEBRIS AND EQUIPMENT XRF RESULTS MAP

United States Environmental Protection Agency

ATTACHMENT D
Laboratory Report

GCAL
GULF COAST ANALYTICAL LABORATORIES, INC

NELAP CERTIFICATE NUMBER 01955
DOD ELAP CERTIFICATE NUMBER ADE - 1482

ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.
7979 GSRI Avenue
Baton Rouge, LA 70820

Report Date 02/17/2011

GCAL Report 211020809

Deliver To	OTIE 1220 Kennestone Circle Suite 106 Marietta, GA 30066 678-355-5550
Attn	Jerry Partap

Project Feltman Farm

CASE NARRATIVE

Client: OTIE **Report:** 211020809

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

METALS

In the SW-846 6010C analysis, sample 21102080901 (SMELTING BUILDING FLOOR SAMPLE) had to be diluted in order to bracket the concentration of target analytes within the linear dynamic range of the instrument and to eliminate a chemical or physical interference. The dilution is reflected in elevated detection limits.

In the SW-846 6010C analysis, samples 21102080904 (FP06-AA9 (0-6)), 21102080905 (AA9-101) and 21102080906 (FP08-Z7 (0-6)) had to be diluted in order to bracket the concentration within the calibration range of the instrument.

In the SW-846 6010C analysis, a chemical or physical interference necessitated a dilution for samples 21102080918 (FP07-AB9 (0-6)) and 21102080919 (FP09-AB7 (0-6)). This is reflected in the elevated reporting limits.

In the SW-846 6010C analysis for prep batch 450304, the MS recovery and post-digestion spike recovery is not applicable for Lead because the sample concentration is greater than four times the spike concentration. The Sample/Duplicate RPD for Lead is above the control limit. The heterogeneous nature of the QC sample is believed to be responsible for this. Lead is flagged E, estimated on the serial dilution form due to the fact that the % difference between the original result and the serial dilution result for the batch QC sample is greater than 10.

In the SW-846 6010C analysis for prep batch 450773, the MS and/or MSD recoveries are outside the control limits for Arsenic, Barium, Magnesium, Potassium, Selenium, and Zinc. The LCS recovery is within control limits. This indicates the analysis is in control and the sample is affected by matrix interference or the element is non-homogeneous in the sample matrix. A post-digestion spike was performed on the QC sample for this batch with recoveries of 83% for Arsenic, 61% for Barium, 81% for Magnesium, 78% for Potassium, 90% for Selenium, and 79% for Zinc. The MS/MSD recoveries and post-digestion spike recoveries are not applicable for Aluminum, Antimony, Calcium, Copper, Iron, Lead, and Manganese because the sample concentration is greater than four times the spike concentration. Aluminum, Copper, Iron, Manganese, Potassium, Silver, and Zinc are flagged E, estimated on the serial dilution form due to the fact that the % difference between the original result and the serial dilution result for the batch QC sample is greater than 10.

In the SW-846 7471B analysis for prep batch 450305, the Sample/Duplicate RPD for Mercury is not applicable because the sample and/or duplicate concentration is less than five times the reporting limit.

In the SW-846 6010B analysis, Copper was detected at a concentration above the PQL in CCBs (ICP5, 02/16/11 1845; 2008 and 02/17 1103). The concentration is insignificant as compared to the associated samples.

In the SW-846 6010B analysis, Iron was detected at a concentration above the PQL in one CCB (ICP5, 02/17 1254). The concentration is insignificant as compared to the associated samples.

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND	Indicates the result was Not Detected at the specified RDL
DO	Indicates the result was Diluted Out
MI	Indicates the result was subject to Matrix Interference
TNTC	Indicates the result was Too Numerous To Count
SUBC	Indicates the analysis was Sub-Contracted
FLD	Indicates the analysis was performed in the Field
PQL	Practical Quantitation Limit
MDL	Method Detection Limit
RDL	Reporting Detection Limit
00:00	Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J	Indicates an estimated value
U	Indicates the compound was analyzed for but not detected
B	(ORGANICS) Indicates the analyte was detected in the associated Method Blank
B	(INORGANICS) Indicates the result is between the RDL and MDL

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with NELAC, this report shall be reproduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the NELAC standard and terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

Estimated uncertainty of measurement is available upon request. This report is in compliance with the DOD QSM as specified in the contract if applicable.

Robyn Migues
Technical Director
GCAL REPORT 211020809

THIS REPORT CONTAINS 97 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
21102080901	SMELTING BUILDING FLOOR SAMPLE	Solid	02/03/2011 16:45	02/08/2011 09:05
21102080902	FP01-AA10 (0-6)	Solid	02/01/2011 14:07	02/08/2011 09:05
21102080903	FP03-AB11 (0-6)	Solid	02/01/2011 13:57	02/08/2011 09:05
21102080904	FP06-AA9 (0-6)	Solid	02/01/2011 16:19	02/08/2011 09:05
21102080905	AA9-101	Solid	02/01/2011 16:20	02/08/2011 09:05
21102080906	FP08-Z7 (0-6)	Solid	02/01/2011 09:43	02/08/2011 09:05
21102080907	FP10-AE9 (0-6)	Solid	02/03/2011 12:35	02/08/2011 09:05
21102080914	AA10-100	Solid	02/01/2011 14:08	02/08/2011 09:05
21102080915	FP02-AB10 (0-6)	Solid	02/01/2011 13:21	02/08/2011 09:05
21102080916	FP04-AC11 (0-6)	Solid	02/01/2011 13:46	02/08/2011 09:05
21102080917	FP05-AC10 (0-6)	Solid	02/01/2011 13:32	02/08/2011 09:05
21102080918	FP07-AB9 (0-6)	Solid	02/01/2011 11:17	02/08/2011 09:05
21102080919	FP09-AB7 (0-6)	Solid	02/01/2011 11:07	02/08/2011 09:05
21102080920	FP11-AE10 (0-6)	Solid	02/03/2011 12:48	02/08/2011 09:05

U.S. EPA - CLP
COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211020809

SOW No.:

EPA Sample No.	*Lab Sample ID.*
SMELTING BUILDING FLO	21102080901
FP01-AA10 (0-6)	21102080902
FP03-AB11 (0-6)	21102080903
FP06-AA9 (0-6)	21102080904
AA9-101	21102080905
FP08-Z7 (0-6)	21102080906
FP10-AE9 (0-6)	21102080907
AA10-100	21102080914
FP02-AB10 (0-6)	21102080915
FP04-AC11 (0-6)	21102080916
FP05-AC10 (0-6)	21102080917
FP07-AB9 (0-6)	21102080918
FP09-AB7 (0-6)	21102080919
FP11-AE10 (0-6)	21102080920

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

COVER PAGE - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL
Sample ID: SMELTING BUILDING FLOOR SAMPLE

Lab Code: LA024 Case No.:
Contract:

Matrix: (soil / water) Solid
SAS No.: SDG No.: 211020809

Level: (low / med)
% Solids: 99.95
Lab Sample ID: 21102080901

Date Received: 02/08/11 Time: 0905
Date Collected: 02/03/11 Time: 1645

Analyte	Concentration	Units	C	MDL	PQL	Method	Type
Aluminum	18.7	mg/kg	B	6.26	79.4	SW-846 6010C	P
Antimony	14500	mg/kg		2.34	47.6	SW-846 6010C	P
Arsenic	2200	mg/kg		0.87	15.9	SW-846 6010C	P
Barium	7.98	mg/kg		0.11	3.97	SW-846 6010C	P
Beryllium	0.027	mg/kg	U	0.027	0.20	SW-846 6010C	P
Cadmium	0.097	mg/kg	U	0.097	0.20	SW-846 6010C	P
Calcium	81.0	mg/kg	B	9.14	298	SW-846 6010C	P
Chromium	0.12	mg/kg	U	0.12	0.79	SW-846 6010C	P
Cobalt	0.22	mg/kg	U	0.22	0.40	SW-846 6010C	P
Copper	23100	mg/kg		0.33	3.97	SW-846 6010C	P
Iron	541	mg/kg		8.99	39.7	SW-846 6010C	P
Lead	72300	mg/kg		0.71	5.95	SW-846 6010C	P
Magnesium	23.9	mg/kg		13.3	19.8	SW-846 6010C	P
Manganese	7.19	mg/kg		0.39	5.95	SW-846 6010C	P
Mercury	0.0034	mg/kg	U	0.0034	0.012	SW-846 7471B	AV
Nickel	8.19	mg/kg		0.31	1.98	SW-846 6010C	P
Potassium	18.1	mg/kg	U	18.1	19.8	SW-846 6010C	P
Selenium	4.01	mg/kg		1.91	1.98	SW-846 6010C	P
Silver	32.1	mg/kg		0.35	0.79	SW-846 6010C	P
Sodium	34.8	mg/kg	U	34.8	39.7	SW-846 6010C	P
Thallium	1.36	mg/kg		0.99	0.99	SW-846 6010C	P
Vanadium	0.49	mg/kg	U	0.49	1.98	SW-846 6010C	P
Zinc	210	mg/kg		3.29	7.94	SW-846 6010C	P

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: FP01-AA10 (0-6)

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Solid | SAS No.: | SDG No.: 211020809

Level: (low / med) | % Solids: 85.83 | Lab Sample ID: 21102080902

Date Received: 02/08/11 | Time: 0905 | Date Collected: 02/01/11 | Time: 1407

Analyte	Concentration	Units	C	MDL	PQL	Method	Type
Aluminum	14900	mg/kg		0.74	9.32	SW-846 6010C	P
Antimony	25.2	mg/kg		0.14	2.80	SW-846 6010C	P
Arsenic	16.0	mg/kg		0.10	1.86	SW-846 6010C	P
Barium	64.8	mg/kg		0.013	0.47	SW-846 6010C	P
Beryllium	0.37	mg/kg		0.0032	0.23	SW-846 6010C	P
Cadmium	0.38	mg/kg		0.011	0.23	SW-846 6010C	P
Calcium	3150	mg/kg		1.07	34.9	SW-846 6010C	P
Chromium	25.5	mg/kg		0.014	0.47	SW-846 6010C	P
Cobalt	6.28	mg/kg		0.025	0.47	SW-846 6010C	P
Copper	199	mg/kg		0.038	0.47	SW-846 6010C	P
Iron	13800	mg/kg		1.06	4.66	SW-846 6010C	P
Lead	5160	mg/kg		0.083	0.70	SW-846 6010C	P
Magnesium	860	mg/kg		1.56	4.66	SW-846 6010C	P
Manganese	721	mg/kg		0.045	0.70	SW-846 6010C	P
Mercury	0.031	mg/kg		0.0040	0.014	SW-846 7471B	AV
Nickel	6.12	mg/kg		0.037	1.86	SW-846 6010C	P
Potassium	492	mg/kg		2.12	9.32	SW-846 6010C	P
Selenium	0.22	mg/kg	U	0.22	1.86	SW-846 6010C	P
Silver	0.041	mg/kg	U	0.041	0.47	SW-846 6010C	P
Sodium	26.2	mg/kg	B	4.09	46.6	SW-846 6010C	P
Thallium	0.40	mg/kg	B	0.12	0.93	SW-846 6010C	P
Vanadium	39.7	mg/kg		0.058	0.93	SW-846 6010C	P
Zinc	79.3	mg/kg		0.39	0.93	SW-846 6010C	P

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL
Sample ID: FP03-AB11 (0-6)
Lab Code: LA024 Case No.:
Contract:
Matrix: (soil / water) Solid
SAS No.: SDG No.: 211020809
Level: (low / med) % Solids: 81.66
Lab Sample ID: 21102080903
Date Received: 02/08/11 Time: 0905
Date Collected: 02/01/11 Time: 1357

Analyte	Concentration	Units	C	MDL	PQL	Method	Type
Aluminum	16600	mg/kg		0.77	9.72	SW-846 6010C	P
Antimony	7.88	mg/kg		0.14	2.92	SW-846 6010C	P
Arsenic	7.00	mg/kg		0.11	1.94	SW-846 6010C	P
Barium	68.7	mg/kg		0.013	0.49	SW-846 6010C	P
Beryllium	0.42	mg/kg		0.0034	0.24	SW-846 6010C	P
Cadmium	0.33	mg/kg		0.012	0.24	SW-846 6010C	P
Calcium	1720	mg/kg		1.12	36.4	SW-846 6010C	P
Chromium	22.5	mg/kg		0.014	0.49	SW-846 6010C	P
Cobalt	8.08	mg/kg		0.026	0.49	SW-846 6010C	P
Copper	95.7	mg/kg		0.040	0.49	SW-846 6010C	P
Iron	15500	mg/kg		1.10	4.86	SW-846 6010C	P
Lead	1540	mg/kg		0.087	0.73	SW-846 6010C	P
Magnesium	531	mg/kg		1.63	4.86	SW-846 6010C	P
Manganese	873	mg/kg		0.047	0.73	SW-846 6010C	P
Mercury	0.047	mg/kg		0.0042	0.015	SW-846 7471B	AV
Nickel	5.68	mg/kg		0.038	1.94	SW-846 6010C	P
Potassium	644	mg/kg		2.21	9.72	SW-846 6010C	P
Selenium	0.23	mg/kg	U	0.23	1.94	SW-846 6010C	P
Silver	0.042	mg/kg	U	0.042	0.49	SW-846 6010C	P
Sodium	16.2	mg/kg	B	4.26	48.6	SW-846 6010C	P
Thallium	0.26	mg/kg	B	0.12	0.97	SW-846 6010C	P
Vanadium	46.0	mg/kg		0.060	0.97	SW-846 6010C	P
Zinc	56.5	mg/kg		0.40	0.97	SW-846 6010C	P

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL
Sample ID: FP06-AA9 (0-6)
Lab Code: LA024 Case No.:
Contract:
Matrix: (soil / water) Solid
SAS No.: SDG No.: 211020809
Level: (low / med) % Solids: 90.04
Lab Sample ID: 21102080904
Date Received: 02/08/11 Time: 0905
Date Collected: 02/01/11 Time: 1619

Analyte	Concentration	Units	C	MDL	PQL	Method	Type
Aluminum	6280	mg/kg		0.70	8.88	SW-846 6010C	P
Antimony	629	mg/kg		0.13	2.67	SW-846 6010C	P
Arsenic	72.4	mg/kg		0.098	1.78	SW-846 6010C	P
Barium	70.6	mg/kg		0.012	0.44	SW-846 6010C	P
Beryllium	0.049	mg/kg	B	0.0031	0.22	SW-846 6010C	P
Cadmium	0.63	mg/kg		0.011	0.22	SW-846 6010C	P
Calcium	1280	mg/kg		1.02	33.3	SW-846 6010C	P
Chromium	12.0	mg/kg		0.013	0.44	SW-846 6010C	P
Cobalt	3.07	mg/kg		0.024	0.44	SW-846 6010C	P
Copper	2980	mg/kg		0.036	0.44	SW-846 6010C	P
Iron	6460	mg/kg		1.01	4.44	SW-846 6010C	P
Lead	33200	mg/kg		0.16	1.33	SW-846 6010C	P
Magnesium	423	mg/kg		1.49	4.44	SW-846 6010C	P
Manganese	302	mg/kg		0.043	0.67	SW-846 6010C	P
Mercury	0.039	mg/kg		0.0037	0.013	SW-846 7471B	AV
Nickel	3.62	mg/kg		0.035	1.78	SW-846 6010C	P
Potassium	336	mg/kg		2.02	8.88	SW-846 6010C	P
Selenium	0.35	mg/kg	B	0.21	1.78	SW-846 6010C	P
Silver	1.87	mg/kg		0.039	0.44	SW-846 6010C	P
Sodium	25.6	mg/kg	B	3.90	44.4	SW-846 6010C	P
Thallium	0.11	mg/kg	U	0.11	0.89	SW-846 6010C	P
Vanadium	17.0	mg/kg		0.055	0.89	SW-846 6010C	P
Zinc	85.2	mg/kg		0.37	0.89	SW-846 6010C	P

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: AA9-101

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Solid | SAS No.: | SDG No.: 211020809

Level: (low / med) | % Solids: 89.24 | Lab Sample ID: 21102080905

Date Received: 02/08/11 | Time: 0905 | Date Collected: 02/01/11 | Time: 1620

Analyte	Concentration	Units	C	MDL	PQL	Method	Type
Aluminum	5290	mg/kg		3.54	44.8	SW-846 6010C	P
Antimony	883	mg/kg		0.66	13.4	SW-846 6010C	P
Arsenic	91.8	mg/kg		0.49	8.96	SW-846 6010C	P
Barium	49.4	mg/kg		0.061	2.24	SW-846 6010C	P
Beryllium	0.016	mg/kg	U	0.016	0.11	SW-846 6010C	P
Cadmium	0.13	mg/kg	B	0.055	1.12	SW-846 6010C	P
Calcium	1200	mg/kg		5.16	168	SW-846 6010C	P
Chromium	11.5	mg/kg		0.065	2.24	SW-846 6010C	P
Cobalt	2.83	mg/kg		0.12	2.24	SW-846 6010C	P
Copper	10500	mg/kg		0.18	2.24	SW-846 6010C	P
Iron	7070	mg/kg		5.08	22.4	SW-846 6010C	P
Lead	28800	mg/kg		0.40	3.36	SW-846 6010C	P
Magnesium	315	mg/kg		7.51	22.4	SW-846 6010C	P
Manganese	340	mg/kg		0.22	3.36	SW-846 6010C	P
Mercury	0.014	mg/kg		0.0038	0.013	SW-846 7471B	AV
Nickel	4.43	mg/kg	B	0.18	8.96	SW-846 6010C	P
Potassium	246	mg/kg		10.2	44.8	SW-846 6010C	P
Selenium	1.10	mg/kg	B	1.08	8.96	SW-846 6010C	P
Silver	2.04	mg/kg	B	0.20	2.24	SW-846 6010C	P
Sodium	19.7	mg/kg	U	19.7	224	SW-846 6010C	P
Thallium	0.56	mg/kg	U	0.56	0.56	SW-846 6010C	P
Vanadium	19.5	mg/kg		0.28	4.48	SW-846 6010C	P
Zinc	331	mg/kg		1.85	4.48	SW-846 6010C	P

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL
Sample ID: FP08-Z7 (0-6)
Lab Code: LA024 Case No.:
Contract:
Matrix: (soil / water) Solid
SAS No.: SDG No.: 211020809
Level: (low / med) % Solids: 91.41
Lab Sample ID: 21102080906
Date Received: 02/08/11 Time: 0905
Date Collected: 02/01/11 Time: 0943

Analyte	Concentration	Units	C	MDL	PQL	Method	Type
Aluminum	11200	mg/kg		0.69	8.75	SW-846 6010C	P
Antimony	1280	mg/kg		0.65	13.1	SW-846 6010C	P
Arsenic	67.1	mg/kg		0.096	1.75	SW-846 6010C	P
Barium	66.3	mg/kg		0.012	0.44	SW-846 6010C	P
Beryllium	0.36	mg/kg		0.0030	0.22	SW-846 6010C	P
Cadmium	0.33	mg/kg		0.011	0.22	SW-846 6010C	P
Calcium	25500	mg/kg		1.01	32.8	SW-846 6010C	P
Chromium	14.4	mg/kg		0.013	0.44	SW-846 6010C	P
Cobalt	2.73	mg/kg		0.024	0.44	SW-846 6010C	P
Copper	1740	mg/kg		0.036	0.44	SW-846 6010C	P
Iron	14800	mg/kg		0.99	4.38	SW-846 6010C	P
Lead	45400	mg/kg		0.39	3.28	SW-846 6010C	P
Magnesium	1390	mg/kg		1.47	4.38	SW-846 6010C	P
Manganese	364	mg/kg		0.043	0.66	SW-846 6010C	P
Mercury	0.032	mg/kg		0.0037	0.013	SW-846 7471B	AV
Nickel	10.5	mg/kg		0.034	1.75	SW-846 6010C	P
Potassium	999	mg/kg		1.99	8.75	SW-846 6010C	P
Selenium	1.30	mg/kg	B	0.21	1.75	SW-846 6010C	P
Silver	4.59	mg/kg		0.038	0.44	SW-846 6010C	P
Sodium	164	mg/kg		3.84	43.8	SW-846 6010C	P
Thallium	3.06	mg/kg		0.11	0.88	SW-846 6010C	P
Vanadium	21.0	mg/kg		0.054	0.88	SW-846 6010C	P
Zinc	177	mg/kg		0.36	0.88	SW-846 6010C	P

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: FP10-AE9 (0-6)

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Solid | SAS No.: | SDG No.: 211020809

Level: (low / med) | % Solids: 84.44 | Lab Sample ID: 21102080907

Date Received: 02/08/11 | Time: 0905 | Date Collected: 02/03/11 | Time: 1235

Analyte	Concentration	Units	C	MDL	PQL	Method	Type
Aluminum	12100	mg/kg		0.75	9.47	SW-846 6010C	P
Antimony	8.54	mg/kg		0.14	2.84	SW-846 6010C	P
Arsenic	4.70	mg/kg		0.10	1.89	SW-846 6010C	P
Barium	35.7	mg/kg		0.013	0.47	SW-846 6010C	P
Beryllium	0.25	mg/kg		0.0033	0.24	SW-846 6010C	P
Cadmium	0.11	mg/kg	B	0.012	0.24	SW-846 6010C	P
Calcium	345	mg/kg		1.09	35.5	SW-846 6010C	P
Chromium	19.4	mg/kg		0.014	0.47	SW-846 6010C	P
Cobalt	3.20	mg/kg		0.026	0.47	SW-846 6010C	P
Copper	46.9	mg/kg		0.039	0.47	SW-846 6010C	P
Iron	12100	mg/kg		1.07	4.74	SW-846 6010C	P
Lead	2090	mg/kg		0.085	0.71	SW-846 6010C	P
Magnesium	170	mg/kg		1.59	4.74	SW-846 6010C	P
Manganese	362	mg/kg		0.046	0.71	SW-846 6010C	P
Mercury	0.020	mg/kg		0.0041	0.014	SW-846 7471B	AV
Nickel	3.18	mg/kg		0.037	1.89	SW-846 6010C	P
Potassium	189	mg/kg		2.16	9.47	SW-846 6010C	P
Selenium	0.23	mg/kg	U	0.23	1.89	SW-846 6010C	P
Silver	0.041	mg/kg	U	0.041	0.47	SW-846 6010C	P
Sodium	4.83	mg/kg	B	4.16	47.4	SW-846 6010C	P
Thallium	0.23	mg/kg	B	0.12	0.95	SW-846 6010C	P
Vanadium	30.6	mg/kg		0.059	0.95	SW-846 6010C	P
Zinc	27.9	mg/kg		0.39	0.95	SW-846 6010C	P

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL
Sample ID: AA10-100
Lab Code: LA024 Case No.:
Contract:
Matrix: (soil / water) Solid
SAS No.: SDG No.: 211020809
Level: (low / med) % Solids: 84.72
Lab Sample ID: 21102080914
Date Received: 02/08/11 Time: 0905
Date Collected: 02/01/11 Time: 1408

Analyte	Concentration	Units	C	MDL	PQL	Method	Type
Lead	2570	mg/kg		0.084	0.71	SW-846 6010C	P

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: FP02-AB10 (0-6)

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Solid | SAS No.: | SDG No.: 211020809

Level: (low / med) | % Solids: 82.03 | Lab Sample ID: 21102080915

Date Received: 02/08/11 | Time: 0905 | Date Collected: 02/01/11 | Time: 1321

Analyte	*Concentration*	*Units*	*C*	*MDL*	*PQL*	*Method*	*Type*
Lead	6830	mg/kg		0.086	0.73	SW-846 6010C	P

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL | Sample ID: FP04-AC11 (0-6)

Lab Code: LA024 | Case No.: | Contract:

Matrix: (soil / water) Solid | SAS No.: | SDG No.: 211020809

Level: (low / med) | % Solids: 85.62 | Lab Sample ID: 21102080916

Date Received: 02/08/11 | Time: 0905 | Date Collected: 02/01/11 | Time: 1346

Analyte	*Concentration*	*Units*	*C*	*MDL*	*PQL*	*Method*	*Type*
Lead	2120	mg/kg		0.084	0.70	SW-846 6010C	P

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL
Sample ID: FP05-AC10 (0-6)
Lab Code: LA024 Case No.:
Contract:
Matrix: (soil / water) Solid
SAS No.: SDG No.: 211020809
Level: (low / med) % Solids: 84.67
Lab Sample ID: 21102080917
Date Received: 02/08/11 Time: 0905
Date Collected: 02/01/11 Time: 1332

Analyte	Concentration	Units	C	MDL	PQL	Method	Type
Lead	1840	mg/kg		0.084	0.71	SW-846 6010C	P

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL
Sample ID: FP07-AB9 (0-6)
Lab Code: LA024
Case No.:
Contract:
Matrix: (soil / water) Solid
SAS No.:
SDG No.: 211020809
Level: (low / med)
% Solids: 91.46
Lab Sample ID: 21102080918
Date Received: 02/08/11
Time: 0905
Date Collected: 02/01/11
Time: 1117

Analyte	Concentration	Units	C	MDL	PQL	Method	Type
Lead	168000	mg/kg		0.78	6.51	SW-846 6010C	P

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL
Sample ID: FP09-AB7 (0-6)
Lab Code: LA024 Case No.:
Contract:
Matrix: (soil / water) Solid
SAS No.: SDG No.: 211020809
Level: (low / med) % Solids: 89.54
Lab Sample ID: 21102080919
Date Received: 02/08/11 Time: 0905
Date Collected: 02/01/11 Time: 1107

Analyte	Concentration	Units	C	MDL	PQL	Method	Type
Lead	65000	mg/kg		0.40	3.35	SW-846 6010C	P

FORM I - IN

INORGANIC ANALYSIS DATA SHEET

Lab Name: GCAL
Sample ID: FP11-AE10 (0-6)
Lab Code: LA024 Case No.:
Contract:
Matrix: (soil / water) Solid
SAS No.: SDG No.: 211020809
Level: (low / med) % Solids: 85.32
Lab Sample ID: 21102080920
Date Received: 02/08/11 Time: 0905
Date Collected: 02/03/11 Time: 1248

Analyte	Concentration	Units	C	MDL	PQL	Method	Type
Lead	89.6	mg/kg		0.084	0.70	SW-846 6010C	P

FORM I - IN

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211020809

Calibration Source: 195-44-1 CPI/EXAXOL Instrument ID: ICP5 ICAL ID: 2

Date Analyzed: 02/15/11 Time: 1512

INITIAL CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Lead	1.00	0.9752	98	mg/L	SW-846 6010C	P

ICV CONTROL LIMITS EPA 6010B = 90-110 EPA 200.7 = 95-105

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL
Contract:
Lab Code: LA024 Case No.:
SAS No.: SDG No.: 211020809
Calibration Source: 195-46-3 INORGANIC VENTURES
Instrument ID: ICP5 ICAL ID: 2
Date Analyzed: 02/15/11 Time: 1524

CRDL STANDARD

Analyte	True	Found	CAL %R	Units	Method	Type
Lead	0.0150	0.0123	82	mg/L	SW-846 6010C	P

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211020809

Calibration Source: 195-46-1 INORGANIC VENTURES Instrument ID: ICP5 ICAL ID: 2

Date Analyzed: 02/15/11 Time: 1552

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Lead	0.500	0.5047	101	mg/L	SW-846 6010C	P

CCV CONTROL LIMITS EPA 6010B AND 200.7 = 90-110 EPA 7470/7471 AND 7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211020809

Calibration Source: 195-46-1 INORGANIC VENTURES Instrument ID: ICP5 ICAL ID: 2

Date Analyzed: 02/15/11 Time: 2103

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Lead	0.500	0.5048	101	mg/L	SW-846 6010C	P

CCV CONTROL LIMITS EPA 6010B AND 200.7 = 90-110 EPA 7470/7471 AND 7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211020809

Calibration Source: 195-46-1 INORGANIC VENTURES Instrument ID: ICP5 ICAL ID: 2

Date Analyzed: 02/15/11 Time: 2221

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Lead	0.500	0.4993	100	mg/L	SW-846 6010C	P

CCV CONTROL LIMITS EPA 6010B AND 200.7 = 90-110 EPA 7470/7471 AND 7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211020809

Calibration Source: 195-46-1 INORGANIC VENTURES Instrument ID: ICP5 ICAL ID: 2

Date Analyzed: 02/15/11 Time: 2331

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Lead	0.500	0.4797	96	mg/L	SW-846 6010C	P

CCV CONTROL LIMITS EPA 6010B AND 200.7 = 90-110 EPA 7470/7471 AND 7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211020809

Calibration Source: 195-46-8 CPI/EXAXOL Instrument ID: ICP5 ICAL ID: 3

Date Analyzed: 02/16/11 Time: 1539

INITIAL CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	10.0	9.50	95	mg/L	SW-846 6010C	P
Barium	1.00	0.9552	96	mg/L	SW-846 6010C	P
Beryllium	1.00	0.9553	96	mg/L	SW-846 6010C	P
Boron	5.00	4.92	98	mg/L	SW-846 6010C	P
Cadmium	1.00	0.9418	94	mg/L	SW-846 6010C	P
Calcium	10.0	9.16	92	mg/L	SW-846 6010C	P
Chromium	1.00	0.9611	96	mg/L	SW-846 6010C	P
Cobalt	1.00	0.926	93	mg/L	SW-846 6010C	P
Copper	1.00	0.9303	93	mg/L	SW-846 6010C	P
Iron	10.0	10.1	101	mg/L	SW-846 6010C	P
Lead	1.00	0.9461	95	mg/L	SW-846 6010C	P
Lithium	1.00	0.9406	94	mg/L	SW-846 6010C	P
Magnesium	10.0	9.32	93	mg/L	SW-846 6010C	P
Manganese	1.00	0.9527	95	mg/L	SW-846 6010C	P
Molybdenum	1.00	0.9507	95	mg/L	SW-846 6010C	P
Nickel	1.00	0.944	94	mg/L	SW-846 6010C	P
Potassium	10.0	9.46	95	mg/L	SW-846 6010C	P
Selenium	1.00	0.9456	95	mg/L	SW-846 6010C	P
Silver	1.00	0.9457	95	mg/L	SW-846 6010C	P
Sodium	10.0	9.42	94	mg/L	SW-846 6010C	P
Strontium	1.00	0.9498	95	mg/L	SW-846 6010C	P
Thallium	1.00	0.9415	94	mg/L	SW-846 6010C	P
Tin	1.00	0.9545	95	mg/L	SW-846 6010C	P
Titanium	1.00	0.9806	98	mg/L	SW-846 6010C	P
Vanadium	1.00	0.927	93	mg/L	SW-846 6010C	P

ICV CONTROL LIMITS EPA 6010B = 90-110 EPA 200.7 = 95-105

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211020809

Calibration Source: 195-47-6 EXAXOL Instrument ID: ICP5 ICAL ID: 3

Date Analyzed: 02/16/11 Time: 1557

INITIAL CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Antimony	1.00	0.9519	95	mg/L	SW-846 6010C	P
Arsenic	1.00	1.01	101	mg/L	SW-846 6010C	P
Zinc	1.00	0.9921	99	mg/L	SW-846 6010C	P
Zirconium	1.00	1.03	103	mg/L	SW-846 6010C	P

ICV CONTROL LIMITS EPA 6010B = 90-110 EPA 200.7 = 95-105

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211020809

Calibration Source: 195-47-2 INORGANIC VENTURES Instrument ID: ICP5 ICAL ID: 3

Date Analyzed: 02/16/11 Time: 1611

CRDL STANDARD

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	0.200	0.1692	85	mg/L	SW-846 6010C	P
Antimony	0.0600	0.0541	90	mg/L	SW-846 6010C	P
Arsenic	0.0100	0.00890	89	mg/L	SW-846 6010C	P
Barium	0.0100	0.00900	90	mg/L	SW-846 6010C	P
Beryllium	0.00500	0.00480	97	mg/L	SW-846 6010C	P
Boron	0.500	0.4709	94	mg/L	SW-846 6010C	P
Cadmium	0.00500	0.00460	93	mg/L	SW-846 6010C	P
Calcium	0.100	0.0932	93	mg/L	SW-846 6010C	P
Chromium	0.0100	0.00910	91	mg/L	SW-846 6010C	P
Cobalt	0.0100	0.00950	95	mg/L	SW-846 6010C	P
Copper	0.0100	0.00740	74	mg/L	SW-846 6010C	P
Iron	0.100	0.0906	91	mg/L	SW-846 6010C	P
Lead	0.0150	0.0140	93	mg/L	SW-846 6010C	P
Lithium	0.0500	0.0474	95	mg/L	SW-846 6010C	P
Magnesium	0.100	0.0845	85	mg/L	SW-846 6010C	P
Manganese	0.0150	0.0144	96	mg/L	SW-846 6010C	P
Molybdenum	0.0500	0.0468	94	mg/L	SW-846 6010C	P
Nickel	0.0400	0.0381	95	mg/L	SW-846 6010C	P
Potassium	0.500	0.4469	89	mg/L	SW-846 6010C	P
Selenium	0.0400	0.0406	101	mg/L	SW-846 6010C	P
Silver	0.0100	0.00900	90	mg/L	SW-846 6010C	P
Sodium	1.00	0.9533	95	mg/L	SW-846 6010C	P
Strontium	0.0500	0.0480	96	mg/L	SW-846 6010C	P
Thallium	0.0100	0.0113	113	mg/L	SW-846 6010C	P
Tin	0.100	0.0755	76	mg/L	SW-846 6010C	P
Titanium	0.100	0.0945	94	mg/L	SW-846 6010C	P
Vanadium	0.0200	0.0196	98	mg/L	SW-846 6010C	P
Zinc	0.0200	0.0191	95	mg/L	SW-846 6010C	P
Zirconium	0.0100	0.00970	97	mg/L	SW-846 6010C	P

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211020809

Calibration Source: 195-46-7 INORGANIC VENTURES Instrument ID: ICP5 ICAL ID: 3

Date Analyzed: 02/16/11 Time: 1638

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	5.00	4.96	99	mg/L	SW-846 6010C	P
Antimony	0.500	0.4804	96	mg/L	SW-846 6010C	P
Arsenic	0.500	0.4994	100	mg/L	SW-846 6010C	P
Barium	0.500	0.4943	99	mg/L	SW-846 6010C	P
Beryllium	0.500	0.498	100	mg/L	SW-846 6010C	P
Boron	2.50	2.51	100	mg/L	SW-846 6010C	P
Cadmium	0.500	0.4971	99	mg/L	SW-846 6010C	P
Calcium	5.00	4.73	95	mg/L	SW-846 6010C	P
Chromium	0.500	0.4951	99	mg/L	SW-846 6010C	P
Cobalt	0.500	0.4923	98	mg/L	SW-846 6010C	P
Copper	0.500	0.4903	98	mg/L	SW-846 6010C	P
Iron	5.00	5.02	100	mg/L	SW-846 6010C	P
Lead	0.500	0.4973	99	mg/L	SW-846 6010C	P
Lithium	0.500	0.4943	99	mg/L	SW-846 6010C	P
Magnesium	5.00	5.03	101	mg/L	SW-846 6010C	P
Manganese	0.500	0.4892	98	mg/L	SW-846 6010C	P
Molybdenum	0.500	0.4897	98	mg/L	SW-846 6010C	P
Nickel	0.500	0.4965	99	mg/L	SW-846 6010C	P
Potassium	10.0	9.86	99	mg/L	SW-846 6010C	P
Selenium	0.500	0.4902	98	mg/L	SW-846 6010C	P
Silicon	5.00	4.97	99	mg/L	SW-846 6010C	P
Silver	0.500	0.4905	98	mg/L	SW-846 6010C	P
Sodium	20.0	19.9	100	mg/L	SW-846 6010C	P
Strontium	0.500	0.4952	99	mg/L	SW-846 6010C	P
Thallium	0.500	0.4882	98	mg/L	SW-846 6010C	P
Tin	0.500	0.4704	94	mg/L	SW-846 6010C	P
Titanium	0.500	0.4942	99	mg/L	SW-846 6010C	P
Vanadium	0.500	0.4934	99	mg/L	SW-846 6010C	P
Zinc	0.500	0.4853	97	mg/L	SW-846 6010C	P
Zirconium	0.500	0.4911	98	mg/L	SW-846 6010C	P

CCV CONTROL LIMITS EPA 6010B AND 200.7 = 90-110 EPA 7470/7471 AND 7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211020809

Calibration Source: 195-46-7 INORGANIC VENTURES Instrument ID: ICP5 ICAL ID: 3

Date Analyzed: 02/16/11 Time: 1717

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	5.00	4.92	98	mg/L	SW-846 6010C	P
Antimony	0.500	0.4755	95	mg/L	SW-846 6010C	P
Arsenic	0.500	0.4996	100	mg/L	SW-846 6010C	P
Barium	0.500	0.4944	99	mg/L	SW-846 6010C	P
Beryllium	0.500	0.4965	99	mg/L	SW-846 6010C	P
Boron	2.50	2.48	99	mg/L	SW-846 6010C	P
Cadmium	0.500	0.4966	99	mg/L	SW-846 6010C	P
Calcium	5.00	4.70	94	mg/L	SW-846 6010C	P
Chromium	0.500	0.4949	99	mg/L	SW-846 6010C	P
Cobalt	0.500	0.4922	98	mg/L	SW-846 6010C	P
Copper	0.500	0.4956	99	mg/L	SW-846 6010C	P
Iron	5.00	4.95	99	mg/L	SW-846 6010C	P
Lead	0.500	0.4949	99	mg/L	SW-846 6010C	P
Lithium	0.500	0.4936	99	mg/L	SW-846 6010C	P
Magnesium	5.00	4.93	99	mg/L	SW-846 6010C	P
Manganese	0.500	0.4891	98	mg/L	SW-846 6010C	P
Molybdenum	0.500	0.4856	97	mg/L	SW-846 6010C	P
Nickel	0.500	0.4953	99	mg/L	SW-846 6010C	P
Potassium	10.0	9.85	99	mg/L	SW-846 6010C	P
Selenium	0.500	0.4868	97	mg/L	SW-846 6010C	P
Silicon	5.00	4.97	99	mg/L	SW-846 6010C	P
Silver	0.500	0.4928	99	mg/L	SW-846 6010C	P
Sodium	20.0	19.8	99	mg/L	SW-846 6010C	P
Strontium	0.500	0.4924	98	mg/L	SW-846 6010C	P
Thallium	0.500	0.480	96	mg/L	SW-846 6010C	P
Tin	0.500	0.4609	92	mg/L	SW-846 6010C	P
Titanium	0.500	0.4926	99	mg/L	SW-846 6010C	P
Vanadium	0.500	0.4945	99	mg/L	SW-846 6010C	P
Zinc	0.500	0.4792	96	mg/L	SW-846 6010C	P
Zirconium	0.500	0.4926	99	mg/L	SW-846 6010C	P

CCV CONTROL LIMITS EPA 6010B AND 200.7 = 90-110 EPA 7470/7471 AND 7XXX = 80-120

FORM II - IN

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211020809

Calibration Source: 195-46-7 INORGANIC VENTURES Instrument ID: ICP5 ICAL ID: 3

Date Analyzed: 02/16/11 Time: 1838

CONTINUING CALIBRATION VERIFICATION

Analyte	True	Found	CAL %R	Units	Method	Type
Aluminum	5.00	4.87	97	mg/L	SW-846 6010C	P
Antimony	0.500	0.4834	97	mg/L	SW-846 6010C	P
Arsenic	0.500	0.5019	100	mg/L	SW-846 6010C	P
Barium	0.500	0.4919	98	mg/L	SW-846 6010C	P
Beryllium	0.500	0.4987	100	mg/L	SW-846 6010C	P
Boron	2.50	2.47	99	mg/L	SW-846 6010C	P
Cadmium	0.500	0.4963	99	mg/L	SW-846 6010C	P
Calcium	5.00	4.81	96	mg/L	SW-846 6010C	P
Chromium	0.500	0.4918	98	mg/L	SW-846 6010C	P
Cobalt	0.500	0.4905	98	mg/L	SW-846 6010C	P
Copper	0.500	0.5506	110	mg/L	SW-846 6010C	P
Iron	5.00	4.95	99	mg/L	SW-846 6010C	P
Lead	0.500	0.4968	99	mg/L	SW-846 6010C	P
Lithium	0.500	0.4963	99	mg/L	SW-846 6010C	P
Magnesium	5.00	4.92	98	mg/L	SW-846 6010C	P
Manganese	0.500	0.4881	98	mg/L	SW-846 6010C	P
Molybdenum	0.500	0.4873	97	mg/L	SW-846 6010C	P
Nickel	0.500	0.4933	99	mg/L	SW-846 6010C	P
Potassium	10.0	9.89	99	mg/L	SW-846 6010C	P
Selenium	0.500	0.4878	98	mg/L	SW-846 6010C	P
Silicon	5.00	5.00	100	mg/L	SW-846 6010C	P
Silver	0.500	0.4937	99	mg/L	SW-846 6010C	P
Sodium	20.0	19.9	100	mg/L	SW-846 6010C	P
Strontium	0.500	0.4948	99	mg/L	SW-846 6010C	P
Thallium	0.500	0.4842	97	mg/L	SW-846 6010C	P
Tin	0.500	0.4667	93	mg/L	SW-846 6010C	P
Titanium	0.500	0.4948	99	mg/L	SW-846 6010C	P
Vanadium	0.500	0.4931	99	mg/L	SW-846 6010C	P
Zinc	0.500	0.5009	100	mg/L	SW-846 6010C	P
Zirconium	0.500	0.4871	97	mg/L	SW-846 6010C	P

CCV CONTROL LIMITS EPA 6010B AND 200.7 = 90-110 EPA 7470/7471 AND 7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211020809

Calibration Source: 195-46-7 INORGANIC VENTURES Instrument ID: ICP5 ICAL ID: 3

Date Analyzed: 02/16/11 Time: 2002

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	5.00	4.86	97	mg/L	SW-846 6010C	P
Antimony	0.500	0.479	96	mg/L	SW-846 6010C	P
Arsenic	0.500	0.4994	100	mg/L	SW-846 6010C	P
Barium	0.500	0.4876	98	mg/L	SW-846 6010C	P
Beryllium	0.500	0.4984	100	mg/L	SW-846 6010C	P
Boron	2.50	2.40	96	mg/L	SW-846 6010C	P
Cadmium	0.500	0.4924	98	mg/L	SW-846 6010C	P
Calcium	5.00	4.79	96	mg/L	SW-846 6010C	P
Chromium	0.500	0.4876	98	mg/L	SW-846 6010C	P
Cobalt	0.500	0.4863	97	mg/L	SW-846 6010C	P
Copper	0.500	0.5502	110	mg/L	SW-846 6010C	P
Iron	5.00	4.95	99	mg/L	SW-846 6010C	P
Lead	0.500	0.4942	99	mg/L	SW-846 6010C	P
Lithium	0.500	0.4973	99	mg/L	SW-846 6010C	P
Magnesium	5.00	4.91	98	mg/L	SW-846 6010C	P
Manganese	0.500	0.4836	97	mg/L	SW-846 6010C	P
Molybdenum	0.500	0.4838	97	mg/L	SW-846 6010C	P
Nickel	0.500	0.4905	98	mg/L	SW-846 6010C	P
Potassium	10.0	9.91	99	mg/L	SW-846 6010C	P
Selenium	0.500	0.4845	97	mg/L	SW-846 6010C	P
Silicon	5.00	5.00	100	mg/L	SW-846 6010C	P
Silver	0.500	0.4903	98	mg/L	SW-846 6010C	P
Sodium	20.0	19.4	97	mg/L	SW-846 6010C	P
Strontium	0.500	0.4808	96	mg/L	SW-846 6010C	P
Thallium	0.500	0.480	96	mg/L	SW-846 6010C	P
Tin	0.500	0.4618	92	mg/L	SW-846 6010C	P
Titanium	0.500	0.4943	99	mg/L	SW-846 6010C	P
Vanadium	0.500	0.4871	97	mg/L	SW-846 6010C	P
Zinc	0.500	0.5048	101	mg/L	SW-846 6010C	P
Zirconium	0.500	0.4841	97	mg/L	SW-846 6010C	P

CCV CONTROL LIMITS EPA 6010B AND 200.7 = 90-110 EPA 7470/7471 AND 7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211020809

Calibration Source: 195-46-7 INORGANIC VENTURES Instrument ID: ICP5 ICAL ID: 3

Date Analyzed: 02/17/11 Time: 0918

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	5.00	4.82	96	mg/L	SW-846 6010C	P
Antimony	0.500	0.4665	93	mg/L	SW-846 6010C	P
Arsenic	0.500	0.472	94	mg/L	SW-846 6010C	P
Barium	0.500	0.4854	97	mg/L	SW-846 6010C	P
Beryllium	0.500	0.4939	99	mg/L	SW-846 6010C	P
Boron	2.50	2.44	98	mg/L	SW-846 6010C	P
Cadmium	0.500	0.4903	98	mg/L	SW-846 6010C	P
Calcium	5.00	4.67	93	mg/L	SW-846 6010C	P
Chromium	0.500	0.4851	97	mg/L	SW-846 6010C	P
Cobalt	0.500	0.4931	99	mg/L	SW-846 6010C	P
Copper	0.500	0.4706	94	mg/L	SW-846 6010C	P
Iron	5.00	4.91	98	mg/L	SW-846 6010C	P
Lead	0.500	0.4847	97	mg/L	SW-846 6010C	P
Lithium	0.500	0.4849	97	mg/L	SW-846 6010C	P
Magnesium	5.00	4.90	98	mg/L	SW-846 6010C	P
Manganese	0.500	0.4767	95	mg/L	SW-846 6010C	P
Molybdenum	0.500	0.476	95	mg/L	SW-846 6010C	P
Nickel	0.500	0.4878	98	mg/L	SW-846 6010C	P
Potassium	10.0	9.76	98	mg/L	SW-846 6010C	P
Selenium	0.500	0.4745	95	mg/L	SW-846 6010C	P
Silicon	5.00	4.93	99	mg/L	SW-846 6010C	P
Silver	0.500	0.4814	96	mg/L	SW-846 6010C	P
Sodium	20.0	19.4	97	mg/L	SW-846 6010C	P
Strontium	0.500	0.4839	97	mg/L	SW-846 6010C	P
Thallium	0.500	0.4819	96	mg/L	SW-846 6010C	P
Tin	0.500	0.4602	92	mg/L	SW-846 6010C	P
Titanium	0.500	0.4895	98	mg/L	SW-846 6010C	P
Vanadium	0.500	0.4871	97	mg/L	SW-846 6010C	P
Zinc	0.500	0.4761	95	mg/L	SW-846 6010C	P
Zirconium	0.500	0.478	96	mg/L	SW-846 6010C	P

CCV CONTROL LIMITS EPA 6010B AND 200.7 = 90-110 EPA 7470/7471 AND 7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211020809

Calibration Source: 195-46-7 INORGANIC VENTURES Instrument ID: ICP5 ICAL ID: 3

Date Analyzed: 02/17/11 Time: 1046

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	5.00	4.86	97	mg/L	SW-846 6010C	P
Antimony	0.500	0.4803	96	mg/L	SW-846 6010C	P
Arsenic	0.500	0.5016	100	mg/L	SW-846 6010C	P
Barium	0.500	0.4937	99	mg/L	SW-846 6010C	P
Beryllium	0.500	0.501	100	mg/L	SW-846 6010C	P
Boron	2.50	2.48	99	mg/L	SW-846 6010C	P
Cadmium	0.500	0.5003	100	mg/L	SW-846 6010C	P
Calcium	5.00	4.70	94	mg/L	SW-846 6010C	P
Chromium	0.500	0.4925	99	mg/L	SW-846 6010C	P
Cobalt	0.500	0.496	99	mg/L	SW-846 6010C	P
Copper	0.500	0.5101	102	mg/L	SW-846 6010C	P
Iron	5.00	4.98	100	mg/L	SW-846 6010C	P
Lead	0.500	0.4959	99	mg/L	SW-846 6010C	P
Lithium	0.500	0.4941	99	mg/L	SW-846 6010C	P
Magnesium	5.00	4.97	99	mg/L	SW-846 6010C	P
Manganese	0.500	0.4872	97	mg/L	SW-846 6010C	P
Molybdenum	0.500	0.4889	98	mg/L	SW-846 6010C	P
Nickel	0.500	0.497	99	mg/L	SW-846 6010C	P
Potassium	10.0	9.91	99	mg/L	SW-846 6010C	P
Selenium	0.500	0.4878	98	mg/L	SW-846 6010C	P
Silicon	5.00	4.92	98	mg/L	SW-846 6010C	P
Silver	0.500	0.489	98	mg/L	SW-846 6010C	P
Sodium	20.0	20.1	100	mg/L	SW-846 6010C	P
Strontium	0.500	0.4994	100	mg/L	SW-846 6010C	P
Thallium	0.500	0.4933	99	mg/L	SW-846 6010C	P
Tin	0.500	0.4679	94	mg/L	SW-846 6010C	P
Titanium	0.500	0.4975	99	mg/L	SW-846 6010C	P
Vanadium	0.500	0.4937	99	mg/L	SW-846 6010C	P
Zinc	0.500	0.4834	97	mg/L	SW-846 6010C	P
Zirconium	0.500	0.486	97	mg/L	SW-846 6010C	P

CCV CONTROL LIMITS EPA 6010B AND 200.7 = 90-110 EPA 7470/7471 AND 7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211020809

Calibration Source: 195-46-7 INORGANIC VENTURES Instrument ID: ICP5 ICAL ID: 3

Date Analyzed: 02/17/11 Time: 1239

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Aluminum	5.00	4.76	95	mg/L	SW-846 6010C	P
Antimony	0.500	0.4685	94	mg/L	SW-846 6010C	P
Arsenic	0.500	0.4889	98	mg/L	SW-846 6010C	P
Barium	0.500	0.4925	98	mg/L	SW-846 6010C	P
Beryllium	0.500	0.4916	98	mg/L	SW-846 6010C	P
Boron	2.50	2.43	97	mg/L	SW-846 6010C	P
Cadmium	0.500	0.4997	100	mg/L	SW-846 6010C	P
Calcium	5.00	4.63	93	mg/L	SW-846 6010C	P
Chromium	0.500	0.4889	98	mg/L	SW-846 6010C	P
Cobalt	0.500	0.4932	99	mg/L	SW-846 6010C	P
Copper	0.500	0.4917	98	mg/L	SW-846 6010C	P
Iron	5.00	4.97	99	mg/L	SW-846 6010C	P
Lead	0.500	0.4917	98	mg/L	SW-846 6010C	P
Lithium	0.500	0.4844	97	mg/L	SW-846 6010C	P
Magnesium	5.00	4.89	98	mg/L	SW-846 6010C	P
Manganese	0.500	0.4846	97	mg/L	SW-846 6010C	P
Molybdenum	0.500	0.4791	96	mg/L	SW-846 6010C	P
Nickel	0.500	0.4943	99	mg/L	SW-846 6010C	P
Potassium	10.0	9.70	97	mg/L	SW-846 6010C	P
Selenium	0.500	0.4756	95	mg/L	SW-846 6010C	P
Silicon	5.00	4.87	97	mg/L	SW-846 6010C	P
Silver	0.500	0.4817	96	mg/L	SW-846 6010C	P
Sodium	20.0	19.3	96	mg/L	SW-846 6010C	P
Strontium	0.500	0.4811	96	mg/L	SW-846 6010C	P
Thallium	0.500	0.481	96	mg/L	SW-846 6010C	P
Tin	0.500	0.4551	91	mg/L	SW-846 6010C	P
Titanium	0.500	0.4884	98	mg/L	SW-846 6010C	P
Vanadium	0.500	0.4904	98	mg/L	SW-846 6010C	P
Zinc	0.500	0.5038	101	mg/L	SW-846 6010C	P
Zirconium	0.500	0.4829	97	mg/L	SW-846 6010C	P

CCV CONTROL LIMITS EPA 6010B AND 200.7 = 90-110 EPA 7470/7471 AND 7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211020809

Calibration Source: 195-40-7 CPI Instrument ID: FIMS1 ICAL ID: 1

Date Analyzed: 02/08/11 Time: 1829

INITIAL CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Mercury	0.00500	0.00520	104	mg/L	SW-846 7471B	AV

ICV CONTROL LIMITS EPA 6010B = 90-110 EPA 200.7 = 95-105

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211020809

Calibration Source: 195-40-6 EXAXOL Instrument ID: FIMS1 ICAL ID: 1

Date Analyzed: 02/08/11 Time: 1832

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Mercury	0.00500	0.00510	101	mg/L	SW-846 7471B	AV

CCV CONTROL LIMITS EPA 6010B AND 200.7 = 90-110 EPA 7470/7471 AND 7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL Contract:

Lab Code: LA024 Case No.: SAS No.: SDG No.: 211020809

Calibration Source: 195-40-6 EXAXOL Instrument ID: FIMS1 ICAL ID: 1

Date Analyzed: 02/08/11 Time: 1859

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Mercury	0.00500	0.00490	99	mg/L	SW-846 7471B	AV

CCV CONTROL LIMITS EPA 6010B AND 200.7 = 90-110 EPA 7470/7471 AND 7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL
Contract:
Lab Code: LA024 Case No.:
SAS No.: SDG No.: 211020809
Calibration Source: 195-40-6 EXAXOL
Instrument ID: FIMS1 ICAL ID: 1
Date Analyzed: 02/08/11 Time: 1918

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Mercury	0.00500	0.00490	98	mg/L	SW-846 7471B	AV

CCV CONTROL LIMITS EPA 6010B AND 200.7 = 90-110 EPA 7470/7471 AND 7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL
Contract:
Lab Code: LA024 Case No.:
SAS No.: SDG No.: 211020809
Calibration Source: 195-40-6 EXAXOL
Instrument ID: FIMS1 ICAL ID: 1
Date Analyzed: 02/09/11 Time: 1131

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Mercury	0.00500	0.00400	80	mg/L	SW-846 7471B	AV

CCV CONTROL LIMITS EPA 6010B AND 200.7 = 90-110 EPA 7470/7471 AND 7XXX = 80-120

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: GCAL
Contract:
Lab Code: LA024 Case No.:
SAS No.: SDG No.: 211020809
Calibration Source: 195-40-6 EXAXOL
Instrument ID: FIMS1 ICAL ID: 1
Date Analyzed: 02/09/11 Time: 1139

CONTINUING CALIBRATION VERIFICATION

Analyte	*True*	*Found*	*CAL %R*	*Units*	*Method*	*Type*
Mercury	0.00500	0.00480	95	mg/L	SW-846 7471B	AV

CCV CONTROL LIMITS EPA 6010B AND 200.7 = 90-110 EPA 7470/7471 AND 7XXX = 80-120

BLANKS

Lab Name: GCAL
Contract:

Lab Code: LA024 Case No.:
SAS No.: SDG No.: 211020809

Lab Sample ID: ICB
ICAL ID: 2

Lab Sample DESC: ICB FOR HBN 450748 [ICP/6714]
Preparation Blank Matrix: (soil / water)

Instrument ID: ICP5
Date Analyzed: 02/15/11 Time: 1517

INITIAL CALIBRATION BLANK

Analyte	*Conc.*	*C*	*Units*	*MDL*	*PQL*	*Method*	*Type*
Lead	0.015	U	mg/L	0.0014	0.015	SW-846 6010C	P

BLANKS

Lab Name: GCAL
Contract:

Lab Code: LA024 Case No.:
SAS No.: SDG No.: 211020809

Lab Sample ID: CCB
ICAL ID: 2

Lab Sample DESC: CCB FOR HBN 450748 [ICP/6714]
Preparation Blank Matrix: (soil / water)

Instrument ID: ICP5
Date Analyzed: 02/15/11 Time: 1559

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Lead	0.015	U	mg/L	0.0014	0.015	SW-846 6010C	P

BLANKS

Lab Name: GCAL
Contract:

Lab Code: LA024 Case No.:
SAS No.: SDG No.: 211020809

Lab Sample ID: CCB
ICAL ID: 2

Lab Sample DESC: CCB FOR HBN 450748 [ICP/6714]
Preparation Blank Matrix: (soil / water)

Instrument ID: ICP5
Date Analyzed: 02/15/11 Time: 2109

CONTINUING CALIBRATION BLANK

Analyte	*Conc.*	*C*	*Units*	*MDL*	*PQL*	*Method*	*Type*
Lead	0.015	U	mg/L	0.0014	0.015	SW-846 6010C	P

BLANKS

Lab Name: GCAL
Contract:

Lab Code: LA024 Case No.:
SAS No.: SDG No.: 211020809

Lab Sample ID: 919335
ICAL ID: 2

Lab Sample DESC: MB919335
Preparation Blank Matrix: (soil / water) Solid

Instrument ID: ICP5
Date Analyzed: 02/15/11 Time: 2116

PREPARATION BLANK

Analyte	*Conc.*	*C*	*Units*	*MDL*	*PQL*	*Method*	*Type*
Lead	0.072	U	mg/kg	0.072	0.60	SW-846 6010C	P

FORM III - IN

BLANKS

Lab Name: GCAL
Contract:

Lab Code: LA024 Case No.:
SAS No.: SDG No.: 211020809

Lab Sample ID: CCB
ICAL ID: 2

Lab Sample DESC: CCB FOR HBN 450748 [ICP/6714]
Preparation Blank Matrix: (soil / water)

Instrument ID: ICP5
Date Analyzed: 02/15/11 Time: 2227

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Lead	0.015	U	mg/L	0.0014	0.015	SW-846 6010C	P

BLANKS

Lab Name: GCAL
Contract:

Lab Code: LA024 Case No.:
SAS No.: SDG No.: 211020809

Lab Sample ID: CCB
ICAL ID: 2

Lab Sample DESC: CCB FOR HBN 450748 [ICP/6714]
Preparation Blank Matrix: (soil / water)

Instrument ID: ICP5
Date Analyzed: 02/15/11 Time: 2338

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Lead	0.015	U	mg/L	0.0014	0.015	SW-846 6010C	P

BLANKS

Lab Name: GCAL
Contract:
Lab Code: LA024 Case No.:
SAS No.: SDG No.: 211020809
Lab Sample ID: ICB
ICAL ID: 3
Lab Sample DESC: ICB FOR HBN 450848 [ICP/6718]
Preparation Blank Matrix: (soil / water)
Instrument ID: ICP5
Date Analyzed: 02/16/11 Time: 1604

INITIAL CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	0.20	U	mg/L	0.044	0.20	SW-846 6010C	P
Antimony	0.060	U	mg/L	0.0040	0.060	SW-846 6010C	P
Arsenic	0.0026	B	mg/L	0.0025	0.010	SW-846 6010C	P
Barium	0.010	U	mg/L	0.00011	0.010	SW-846 6010C	P
Beryllium	0.0050	U	mg/L	0.00011	0.0050	SW-846 6010C	P
Cadmium	0.0050	U	mg/L	0.00011	0.0050	SW-846 6010C	P
Calcium	0.10	U	mg/L	0.026	0.10	SW-846 6010C	P
Chromium	0.010	U	mg/L	0.00034	0.010	SW-846 6010C	P
Cobalt	0.00040	B	mg/L	0.00040	0.010	SW-846 6010C	P
Copper	0.010	U	mg/L	0.0014	0.010	SW-846 6010C	P
Iron	0.10	U	mg/L	0.038	0.10	SW-846 6010C	P
Lead	0.015	U	mg/L	0.0014	0.015	SW-846 6010C	P
Magnesium	0.10	U	mg/L	0.014	0.10	SW-846 6010C	P
Manganese	0.015	U	mg/L	0.0012	0.015	SW-846 6010C	P
Nickel	0.040	U	mg/L	0.00096	0.040	SW-846 6010C	P
Potassium	0.50	U	mg/L	0.053	0.50	SW-846 6010C	P
Selenium	0.040	U	mg/L	0.0043	0.040	SW-846 6010C	P
Silver	0.010	U	mg/L	0.00060	0.010	SW-846 6010C	P
Sodium	1.00	U	mg/L	0.051	1.00	SW-846 6010C	P
Thallium	0.020	U	mg/L	0.0018	0.020	SW-846 6010C	P
Vanadium	0.0011	B	mg/L	0.00082	0.020	SW-846 6010C	P
Zinc	0.0028	B	mg/L	0.0027	0.020	SW-846 6010C	P

Lab Name: GCAL
Contract:
Lab Code: LA024 Case No.:
SAS No.: SDG No.: 211020809
Lab Sample ID: CCB
ICAL ID: 3
Lab Sample DESC: CCB FOR HBN 450848 [ICP/6718]
Preparation Blank Matrix: (soil / water)
Instrument ID: ICP5
Date Analyzed: 02/16/11 Time: 1645

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	0.20	U	mg/L	0.044	0.20	SW-846 6010C	P
Antimony	0.060	U	mg/L	0.0040	0.060	SW-846 6010C	P
Arsenic	0.010	U	mg/L	0.0025	0.010	SW-846 6010C	P
Barium	0.010	U	mg/L	0.00011	0.010	SW-846 6010C	P
Beryllium	0.0050	U	mg/L	0.00011	0.0050	SW-846 6010C	P
Cadmium	0.0050	U	mg/L	0.00011	0.0050	SW-846 6010C	P
Calcium	0.10	U	mg/L	0.026	0.10	SW-846 6010C	P
Chromium	0.010	U	mg/L	0.00034	0.010	SW-846 6010C	P
Cobalt	0.00056	B	mg/L	0.00040	0.010	SW-846 6010C	P
Copper	0.010	U	mg/L	0.0014	0.010	SW-846 6010C	P
Iron	0.10	U	mg/L	0.038	0.10	SW-846 6010C	P
Lead	0.015	U	mg/L	0.0014	0.015	SW-846 6010C	P
Magnesium	0.039	B	mg/L	0.014	0.10	SW-846 6010C	P
Manganese	0.015	U	mg/L	0.0012	0.015	SW-846 6010C	P
Nickel	0.0012	B	mg/L	0.00096	0.040	SW-846 6010C	P
Potassium	0.50	U	mg/L	0.053	0.50	SW-846 6010C	P
Selenium	0.040	U	mg/L	0.0043	0.040	SW-846 6010C	P
Silver	0.010	U	mg/L	0.00060	0.010	SW-846 6010C	P
Sodium	1.00	U	mg/L	0.051	1.00	SW-846 6010C	P
Thallium	0.020	U	mg/L	0.0018	0.020	SW-846 6010C	P
Vanadium	0.020	U	mg/L	0.00082	0.020	SW-846 6010C	P
Zinc	0.0042	B	mg/L	0.0027	0.020	SW-846 6010C	P

BLANKS

Lab Name: GCAL
Contract:

Lab Code: LA024 Case No.:
SAS No.: SDG No.: 211020809

Lab Sample ID: CCB
ICAL ID: 3

Lab Sample DESC: CCB FOR HBN 450848 [ICP/6718]
Preparation Blank Matrix: (soil / water)

Instrument ID: ICP5
Date Analyzed: 02/16/11 Time: 1723

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	0.20	U	mg/L	0.044	0.20	SW-846 6010C	P
Antimony	0.060	U	mg/L	0.0040	0.060	SW-846 6010C	P
Arsenic	0.010	U	mg/L	0.0025	0.010	SW-846 6010C	P
Barium	0.010	U	mg/L	0.00011	0.010	SW-846 6010C	P
Beryllium	0.0050	U	mg/L	0.00011	0.0050	SW-846 6010C	P
Cadmium	0.0050	U	mg/L	0.00011	0.0050	SW-846 6010C	P
Calcium	0.10	U	mg/L	0.026	0.10	SW-846 6010C	P
Chromium	0.010	U	mg/L	0.00034	0.010	SW-846 6010C	P
Cobalt	0.00065	B	mg/L	0.00040	0.010	SW-846 6010C	P
Copper	0.010	U	mg/L	0.0014	0.010	SW-846 6010C	P
Iron	0.10	U	mg/L	0.038	0.10	SW-846 6010C	P
Lead	0.015	U	mg/L	0.0014	0.015	SW-846 6010C	P
Magnesium	0.10	U	mg/L	0.014	0.10	SW-846 6010C	P
Manganese	0.015	U	mg/L	0.0012	0.015	SW-846 6010C	P
Nickel	0.040	U	mg/L	0.00096	0.040	SW-846 6010C	P
Potassium	0.50	U	mg/L	0.053	0.50	SW-846 6010C	P
Selenium	0.040	U	mg/L	0.0043	0.040	SW-846 6010C	P
Silver	0.010	U	mg/L	0.00060	0.010	SW-846 6010C	P
Sodium	1.00	U	mg/L	0.051	1.00	SW-846 6010C	P
Thallium	0.020	U	mg/L	0.0018	0.020	SW-846 6010C	P
Vanadium	0.020	U	mg/L	0.00082	0.020	SW-846 6010C	P
Zinc	0.020	U	mg/L	0.0027	0.020	SW-846 6010C	P

BLANKS

Lab Name: GCAL
Contract:

Lab Code: LA024 Case No.:
SAS No.: SDG No.: 211020809

Lab Sample ID: 921589
ICAL ID: 3

Lab Sample DESC: MB921589
Preparation Blank Matrix: (soil / water) Solid

Instrument ID: ICP5
Date Analyzed: 02/16/11 Time: 1730

PREPARATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	0.63	U	mg/kg	0.63	8.00	SW-846 6010C	P
Antimony	0.12	U	mg/kg	0.12	2.40	SW-846 6010C	P
Arsenic	0.088	U	mg/kg	0.088	1.60	SW-846 6010C	P
Barium	0.011	U	mg/kg	0.011	0.40	SW-846 6010C	P
Beryllium	0.0028	U	mg/kg	0.0028	0.20	SW-846 6010C	P
Cadmium	0.021	B	mg/kg	0.0098	0.20	SW-846 6010C	P
Calcium	0.92	U	mg/kg	0.92	30.0	SW-846 6010C	P
Chromium	0.012	U	mg/kg	0.012	0.40	SW-846 6010C	P
Cobalt	0.022	U	mg/kg	0.022	0.40	SW-846 6010C	P
Copper	0.033	U	mg/kg	0.033	0.40	SW-846 6010C	P
Iron	1.88	B	mg/kg	0.91	4.00	SW-846 6010C	P
Lead	0.17	B	mg/kg	0.072	0.60	SW-846 6010C	P
Magnesium	1.34	U	mg/kg	1.34	4.00	SW-846 6010C	P
Manganese	0.039	U	mg/kg	0.039	0.60	SW-846 6010C	P
Nickel	0.031	U	mg/kg	0.031	1.60	SW-846 6010C	P
Potassium	1.82	U	mg/kg	1.82	8.00	SW-846 6010C	P
Selenium	0.19	U	mg/kg	0.19	1.60	SW-846 6010C	P
Silver	0.035	U	mg/kg	0.035	0.40	SW-846 6010C	P
Sodium	3.51	U	mg/kg	3.51	40.0	SW-846 6010C	P
Thallium	0.10	U	mg/kg	0.10	0.80	SW-846 6010C	P
Vanadium	0.050	U	mg/kg	0.050	0.80	SW-846 6010C	P
Zinc	0.33	U	mg/kg	0.33	0.80	SW-846 6010C	P

Lab Name: GCAL
Contract:
Lab Code: LA024 Case No.:
SAS No.: SDG No.: 211020809
Lab Sample ID: CCB
ICAL ID: 3
Lab Sample DESC: CCB FOR HBN 450848 [ICP/6718]
Preparation Blank Matrix: (soil / water)
Instrument ID: ICP5
Date Analyzed: 02/16/11 Time: 1845

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	0.20	U	mg/L	0.044	0.20	SW-846 6010C	P
Antimony	0.060	U	mg/L	0.0040	0.060	SW-846 6010C	P
Arsenic	0.010	U	mg/L	0.0025	0.010	SW-846 6010C	P
Barium	0.010	U	mg/L	0.00011	0.010	SW-846 6010C	P
Beryllium	0.0050	U	mg/L	0.00011	0.0050	SW-846 6010C	P
Cadmium	0.0050	U	mg/L	0.00011	0.0050	SW-846 6010C	P
Calcium	0.10	U	mg/L	0.026	0.10	SW-846 6010C	P
Chromium	0.010	U	mg/L	0.00034	0.010	SW-846 6010C	P
Cobalt	0.010	U	mg/L	0.00040	0.010	SW-846 6010C	P
Copper	0.046		mg/L	0.0014	0.010	SW-846 6010C	P
Iron	0.10	U	mg/L	0.038	0.10	SW-846 6010C	P
Lead	0.0030	B	mg/L	0.0014	0.015	SW-846 6010C	P
Magnesium	0.10	U	mg/L	0.014	0.10	SW-846 6010C	P
Manganese	0.015	U	mg/L	0.0012	0.015	SW-846 6010C	P
Nickel	0.040	U	mg/L	0.00096	0.040	SW-846 6010C	P
Potassium	0.50	U	mg/L	0.053	0.50	SW-846 6010C	P
Selenium	0.040	U	mg/L	0.0043	0.040	SW-846 6010C	P
Silver	0.00069	B	mg/L	0.00060	0.010	SW-846 6010C	P
Sodium	1.00	U	mg/L	0.051	1.00	SW-846 6010C	P
Thallium	0.020	U	mg/L	0.0018	0.020	SW-846 6010C	P
Vanadium	0.0015	B	mg/L	0.00082	0.020	SW-846 6010C	P
Zinc	0.013	B	mg/L	0.0027	0.020	SW-846 6010C	P

BLANKS

Lab Name: GCAL
Contract:

Lab Code: LA024 Case No.:
SAS No.: SDG No.: 211020809

Lab Sample ID: CCB
ICAL ID: 3

Lab Sample DESC: CCB FOR HBN 450848 [ICP/6718]
Preparation Blank Matrix: (soil / water)

Instrument ID: ICP5
Date Analyzed: 02/16/11 Time: 2008

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	0.20	U	mg/L	0.044	0.20	SW-846 6010C	P
Antimony	0.0043	B	mg/L	0.0040	0.060	SW-846 6010C	P
Arsenic	0.010	U	mg/L	0.0025	0.010	SW-846 6010C	P
Barium	0.010	U	mg/L	0.00011	0.010	SW-846 6010C	P
Beryllium	0.0050	U	mg/L	0.00011	0.0050	SW-846 6010C	P
Cadmium	0.0050	U	mg/L	0.00011	0.0050	SW-846 6010C	P
Calcium	0.10	U	mg/L	0.026	0.10	SW-846 6010C	P
Chromium	0.010	U	mg/L	0.00034	0.010	SW-846 6010C	P
Cobalt	0.010	U	mg/L	0.00040	0.010	SW-846 6010C	P
Copper	0.049		mg/L	0.0014	0.010	SW-846 6010C	P
Iron	0.10	U	mg/L	0.038	0.10	SW-846 6010C	P
Lead	0.0033	B	mg/L	0.0014	0.015	SW-846 6010C	P
Magnesium	0.10	U	mg/L	0.014	0.10	SW-846 6010C	P
Manganese	0.015	U	mg/L	0.0012	0.015	SW-846 6010C	P
Nickel	0.040	U	mg/L	0.00096	0.040	SW-846 6010C	P
Potassium	0.50	U	mg/L	0.053	0.50	SW-846 6010C	P
Selenium	0.040	U	mg/L	0.0043	0.040	SW-846 6010C	P
Silver	0.010	U	mg/L	0.00060	0.010	SW-846 6010C	P
Sodium	1.00	U	mg/L	0.051	1.00	SW-846 6010C	P
Thallium	0.020	U	mg/L	0.0018	0.020	SW-846 6010C	P
Vanadium	0.020	U	mg/L	0.00082	0.020	SW-846 6010C	P
Zinc	0.019	B	mg/L	0.0027	0.020	SW-846 6010C	P

Lab Name: GCAL
Contract:
Lab Code: LA024 Case No.:
SAS No.: SDG No.: 211020809
Lab Sample ID: CCB
ICAL ID: 3
Lab Sample DESC: CCB FOR HBN 450848 [ICP/6718]
Preparation Blank Matrix: (soil / water)
Instrument ID: ICP5
Date Analyzed: 02/17/11 Time: 0924

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	0.20	U	mg/L	0.044	0.20	SW-846 6010C	P
Antimony	0.060	U	mg/L	0.0040	0.060	SW-846 6010C	P
Arsenic	0.010	U	mg/L	0.0025	0.010	SW-846 6010C	P
Barium	0.010	U	mg/L	0.00011	0.010	SW-846 6010C	P
Beryllium	0.0050	U	mg/L	0.00011	0.0050	SW-846 6010C	P
Cadmium	0.0050	U	mg/L	0.00011	0.0050	SW-846 6010C	P
Calcium	0.10	U	mg/L	0.026	0.10	SW-846 6010C	P
Chromium	0.010	U	mg/L	0.00034	0.010	SW-846 6010C	P
Cobalt	0.010	U	mg/L	0.00040	0.010	SW-846 6010C	P
Copper	0.0042	B	mg/L	0.0014	0.010	SW-846 6010C	P
Iron	0.046	B	mg/L	0.038	0.10	SW-846 6010C	P
Lead	0.015	U	mg/L	0.0014	0.015	SW-846 6010C	P
Magnesium	0.10	U	mg/L	0.014	0.10	SW-846 6010C	P
Manganese	0.015	U	mg/L	0.0012	0.015	SW-846 6010C	P
Nickel	0.0016	B	mg/L	0.00096	0.040	SW-846 6010C	P
Potassium	0.50	U	mg/L	0.053	0.50	SW-846 6010C	P
Selenium	0.040	U	mg/L	0.0043	0.040	SW-846 6010C	P
Silver	0.010	U	mg/L	0.00060	0.010	SW-846 6010C	P
Sodium	1.00	U	mg/L	0.051	1.00	SW-846 6010C	P
Thallium	0.020	U	mg/L	0.0018	0.020	SW-846 6010C	P
Vanadium	0.0020	B	mg/L	0.00082	0.020	SW-846 6010C	P
Zinc	0.0092	B	mg/L	0.0027	0.020	SW-846 6010C	P

BLANKS

Lab Name: GCAL
Contract:

Lab Code: LA024 Case No.:
SAS No.: SDG No.: 211020809

Lab Sample ID: CCB
ICAL ID: 3

Lab Sample DESC: CCB FOR HBN 450848 [ICP/6718]
Preparation Blank Matrix: (soil / water)

Instrument ID: ICP5
Date Analyzed: 02/17/11 Time: 1103

CONTINUING CALIBRATION BLANK

Analyte	Conc.	C	Units	MDL	PQL	Method	Type
Aluminum	0.20	U	mg/L	0.044	0.20	SW-846 6010C	P
Antimony	0.060	U	mg/L	0.0040	0.060	SW-846 6010C	P
Arsenic	0.010	U	mg/L	0.0025	0.010	SW-846 6010C	P
Barium	0.010	U	mg/L	0.00011	0.010	SW-846 6010C	P
Beryllium	0.0050	U	mg/L	0.00011	0.0050	SW-846 6010C	P
Cadmium	0.0050	U	mg/L	0.00011	0.0050	SW-846 6010C	P
Calcium	0.10	U	mg/L	0.026	0.10	SW-846 6010C	P
Chromium	0.010	U	mg/L	0.00034	0.010	SW-846 6010C	P
Cobalt	0.010	U	mg/L	0.00040	0.010	SW-846 6010C	P
Copper	0.022		mg/L	0.0014	0.010	SW-846 6010C	P
Iron	0.041	B	mg/L	0.038	0.10	SW-846 6010C	P
Lead	0.015	U	mg/L	0.0014	0.015	SW-846 6010C	P
Magnesium	0.10	U	mg/L	0.014	0.10	SW-846 6010C	P
Manganese	0.015	U	mg/L	0.0012	0.015	SW-846 6010C	P
Nickel	0.040	U	mg/L	0.00096	0.040	SW-846 6010C	P
Potassium	0.50	U	mg/L	0.053	0.50	SW-846 6010C	P
Selenium	0.040	U	mg/L	0.0043	0.040	SW-846 6010C	P
Silver	0.010	U	mg/L	0.00060	0.010	SW-846 6010C	P
Sodium	1.00	U	mg/L	0.051	1.00	SW-846 6010C	P
Thallium	0.020	U	mg/L	0.0018	0.020	SW-846 6010C	P
Vanadium	0.00086	B	mg/L	0.00082	0.020	SW-846 6010C	P
Zinc	0.0055	B	mg/L	0.0027	0.020	SW-846 6010C	P