EA Engineering, Science,
and Technology, Inc.

South Central Region
405 S. Highway 121, Suite C-100
Lewisville, TX 75067
Telephone: 972-315-3922
Fax: 972-315-5181
www.eaest.com

11 October 2010

Mrs. Monika O'Sullivan
Task Order Monitor
U.S. Environmental Protection Agency (EPA)
75 Hawthorne Street SFD-6-2
San Francisco, CA 94105

Subject: **Data Evaluation Summary Report Addendum II**
Iron King Mine - Humboldt Smelter Superfund Site
Remedial Investigation/Feasibility Study
EPA Region 6 Remedial Action Contract 2
Contract: EP-W-06-004
Task Order: 0034-RICO-09MX

Dear Mrs. O'Sullivan:

EA Engineering, Science, and Technology, Inc. (EA) is enclosing two original hard copies and two electronic copies on compact disc (CD) of the Data Evaluation Summary Report Addendum II for the above-referenced Task Order. An additional hard copy and electronic copy on CD was prepared for the Arizona Department of Environmental Quality. An electronic copy of this document was transmitted via e-mail on 11 October 2010.

If you have any questions regarding this submittal, please call me at (972) 459-5046.

Sincerely,

Doug McReynolds

Doug McReynolds
Project Manager

Enclosure

cc: Michael Pheeny, EPA Contracting Officer (letter only)
Rena McClurg, EPA Project Officer (letter only)
Fritz Meyer, EA Program Manager (letter only via e-mail)
Jeff Hills, EA Financial Manager (letter only via e-mail)
Arizona Department of Environmental Quality (1 hard copy and 1 electronic copy on CD)
File

TRANSMITTAL OF DOCUMENTS FOR ACCEPTANCE BY EPA			DATE: **11 October 2010**	TRANSMITTAL NO.: **0000022**
TO: **Mrs. Monika O'Sullivan** **U.S. Environmental Protection Agency Region 9**		FROM: **Mr. Doug McReynolds** **EA Engineering, Science, and Technology, Inc.**		
SUBTASK NO.	DELIVERABLE		NO. OF COPIES	
6.1.4	Data Evaluation Summary Report Addendum II Iron King Mine - Humboldt Smelter Superfund Site Remedial Investigation/Feasibility Study		2 Hard Copies and 2 Electronic Copies on Compact Disc (CD) 1 Hard Copy and 1 Electronic Copy on CD to the Arizona Department of Environmental Quality	
ACCEPTANCE ACTION				
DOCUMENTS FOUND ACCEPTABLE (LIST BY SUBTASK NO.)		NAME/TITLE/SIGNATURE OF REVIEWER DATE		

Data Evaluation Summary Report Addendum II
Iron King Mine – Humboldt Smelter Superfund Site
Remedial Investigation/Feasibility Study
Dewey-Humboldt, Yavapai County, Arizona
EPA Identification No. AZ0000309013

Remedial Action Contract 2 Full Service
Contract: EP-W-06-004
Task Order: 0034-RICO-09MX

Prepared for

U.S. Environmental Protection Agency
Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

Prepared by

EA Engineering, Science, and Technology, Inc.
405 S. Highway 121
Building C, Suite 100
Lewisville, Texas 75067
(972) 315-3922

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LIST OF ACRONYMS AND ABBREVIATIONS

µg	Microgram
µg/L	Microgram per Liter
µm	Microns
ABA	Acid base accounting
ACCU	Automatic cartridge collection unit
AOI	Area of Interest
bgs	Below ground surface
CARB	California Air Resources Board
CLP	Contract Laboratory Program
COPC	Contaminant of potential concern
CRDL	Contract-required detection limit
CRQL	Contract-required quantitation limit
CSM	Conceptual site model
DESR	Data Evaluation Summary Report
DQA	Data quality assessment
DQO	Data quality objectives
EA	EA Engineering, Science, and Technology, Inc.
EPA	U.S. Environmental Protection Agency
HHRA	Human Health Risk Assessment
HMX	High melting explosive
ICP	Inductively-Coupled Plasma
J	Estimated
J+	Estimated with potential high bias
J-	Estimated with potential low bias
LCS	Laboratory control sample
MD	Matrix duplicates
MDL	Method detection limit
MS	Matrix spike
MSD	Matrix spike duplicate
PARCCS	Precision, accuracy, completeness, comparability, representativeness, and sensitivity
PM-10	Particulate matter less than 10 microns
QA/QC	Quality Assurance/Quality Control
R	Rejected
RI/FS	Remedial Investigation/Feasibility Study
RPD	Relative percent difference
SAP	Sampling and Analysis Plan
SDG	Sample delivery group
Site	Iron King Mine – Humboldt Smelter Superfund Site
SOP	Standard Operating Procedures
SOW	Statement of Work
TAL	Target Analyte List

LIST OF ACRONYMS AND ABBREVIATIONS (CONT.)

TCLP	Toxicity Characteristic Leaching Procedure
TSP	Total suspended particulates
U	Nondetected
UJ	Estimated nondetect
VOC	Volatile organic compounds
VSP	Visual Sample Plan

1. INTRODUCTION

This document presents the Data Evaluation Summary Report (DESR) Addendum II prepared by EA Engineering, Science, and Technology, Inc. (EA) for the Iron King Mine – Humboldt Smelter Superfund Site (Site) located in Dewey-Humboldt, Yavapai County, Arizona. This DESR Addendum II documents and summarizes the analytical data collected during the Remedial Investigation/ Feasibility Study (RI/FS) May 2010 sampling portion of the field investigation. EA produced this DESR Addendum II for the U.S. Environmental Protection Agency (EPA) Region 6 as part of Task Order No. 0034-RICO-09MX under Remedial Action Contract No. EP-W-06-004, in accordance with the Statement of Work (SOW) issued by EPA (EPA 2010).

The purpose of the field investigation was to collect sufficient data to support the RI/FS for the Site. The media sampled included ground water and surface and surface soil. The EPA RI/FS SOW (EPA 2010) and the EPA approved Work Plan (EA 2010) set forth the framework and requirements for the May 2010 sampling effort.

The purpose of the DESR Addendum II is presented in Section 2. A data summary compiling, tabulating, and summarizing the data collected during the May 2010 sampling RI activities is provided in Section 3. The Quality Assurance/Quality Control (QA/QC) findings are presented in Section 4. Data evaluation parameters are presented in Section 5. The data quality objectives evaluation and conclusions are presented in Section 6. References are provided in Section 7. Supporting materials follow the text.

2. PURPOSE

The purpose of this DESR Addendum is to summarize analytical data quality and usability as related to the project-specific data quality objectives (DQOs) presented in the Sampling and Analysis Plan (SAP) (EA 2008). The DQO process is a series of planning steps designed to ensure that the type, quantity, and quality of environmental data used in decision-making are appropriate for the intended application. The project-specific DQOs for the RI/FS process were developed and presented in the SAP. The methods and techniques required to yield analytical data of acceptable quality and quantity to support DQOs are also outlined in the SAP.

The principal study questions for the Site derived from the DQO process are as follows:

> ***What are the nature and extent of air, soil, sediment, surface water, and ground water contamination at the Areas of Interest (AOI)?***
>
> ***What are the migration pathways for these contaminants to be transported to other AOIs?***

Are concentrations of AOI contaminants of potential concern (COPCs) significantly greater than background?

What is the potential risk to human health and ecological receptors from exposure to Site related COPCs at the AOIs?

In order to address these study questions and focus the investigation, a conceptual site model (CSM) was prepared as presented in Appendix B of the SAP (EA 2008). From August through October 2008, the initial field sampling event was conducted. In January 2009, the data were evaluated and data gaps were identified. The April 2009 Data Evaluation Summary Report summarized and evaluated the initial dataset (EA 2009a). Subsequently, EPA tasked EA to conduct additional sampling, which has been referred to as the data gaps sampling event. The data gaps sampling event data, which included data collected from December 2008 through June 2009, was summarized and evaluated in the December 2009 DESR Addendum (EA 2009b) . Additional Site characterization and hazardous waste classification determination was conducted during May 2010 sampling event. The data from that event are the subject of this DESR Addendum II.

During the May 2010 sampling event, multi-media samples were analyzed for Target Analyte List (TAL) metals (including mercury and cyanide), Toxicity Characteristic Leachate Procedure (TCLP) metals, inorganics (including sulfate, fluoride, chloride, bromide, and nitrogen), percent solid, and Total Dissolved Solid (TDS). Analytical methods used to perform the analyses are provided in Section 4 below.

3. DATA SUMMARY

This section presents a summary of the data collected during the May 2010 sampling portion of the RI field investigation. The media sampled included ground water and surface soil. Data summary tables are presented in Appendix A.

3.1 DATA GROUPINGS

The Site is a combination of sources and releases from two separate facilities: the Iron King Mine property and the Humboldt Smelter property. A portion of the Town of Humboldt is situated between the mine and the smelter. Based on historic and future reuse, the following AOIs were identified:

- Iron King Mine – The Iron King Mine Proper Area, Iron King Operations Area, Former Fertilizer Plant Area, and ancillary associated properties
- Humboldt Smelter and ancillary associated properties
- Off-site Soil (a.k.a., In-town Soil) in the vicinity of the Site

- Waterways - Including the Chaparral Gulch, Galena Gulch, Aqua Fria River, and adjoining drainage channels and outfalls

- Ground Water - Shallow alluvial and deep bedrock ground water.

Subsequently, these areas were further subdivided into individual exposure areas based on the historical use, presence of contaminants, potential reuse, regulatory differences, etc. Data groupings that were sampled as part of May 2010 and hazardous waste determination sampling are presented in Table A-1 of Appendix A. The following sections present a summary of the data collected as part of the May 2010 field investigation.

3.2 SOIL/SEDIMENT SAMPLING

During the May 2010 field investigation, EA collected surface soil/sediment samples from 0 to 12-inches below ground surface (bgs). Soil/sediment samples were analyzed for TAL Metals (including mercury and cyanide), TCLP metals, and sulfate.

Soil samples were collected to evaluate the nature and extent of impacts in areas that were not adequately characterized during the initial RI field investigation and the first data gaps sampling event, or because the initial sampling event provided evidence that additional delineation was required (particularly in the In-town Soil AOI). In addition, surface soil samples were collected throughout the Site to determine the hazardous waste characteristics of the Site; these samples were analyzed via the TCLP.

3.2.1 In-town Soil Sampling

Residential and commercial properties located in the In-town Soil AOI were sampled to evaluate the nature and extent of TAL metals. Surface soil samples from the 0 to 12-inch depth interval (1318 samples – including duplicates) were collected from as presented in Tables A-2 of Appendix A. The results of these samples are presented in Table A-3 of Appendix A.

3.2.2 TCLP Analysis

TCLP is a soil sample extraction method for chemical analysis employed as an analytical method to simulate leaching through a landfill. The extract from samples collected during this event was analyzed for selected metals. Ten (10) surface soil samples (including duplicates) were also collected for TCLP analysis, as presented in Table A-2 of Appendix A.

3.2.3 Background Surface Soil Sampling

During the May 2010 field investigation, EA collected additional samples from 30 background locations and analyzed the samples for TAL metals analysis. Thirty-two (32) surface soil samples (including duplicates) were collected from Background Soil Type 1 to further refine the background data set (see Tables A-2 and A-3 of Appendix A).

3.3 GROUND WATER SAMPLING

Ground water samples were collected from private and municipal taps to evaluate whether elevated inorganics in shallow (alluvial) and deep (bedrock) ground water are regional or may be attributable to the Site. In addition, the five EPA installed alluvial ground water wells and single deep bedrock ground water well were sampled to evaluate impacts to ground water.

Filtered and unfiltered ground water samples were collected to evaluate the dissolved and total concentrations of inorganics in water. Ground water samples were analyzed for selected TAL metals (including mercury and cyanide), inorganics (including sulfate, fluoride, chloride, bromide, and nitrogen), and TDS, as presented in the Appendix A Tables. A summary of ground water sample analyses for unfiltered samples is presented in Table A-4 of Appendix A; Table A-5 of Appendix A presents a summary of the detected unfiltered analytes. These same tables are presented for filtered ground water samples in Tables A-6 and A-7of Appendix A.

3.4 TCLP SAMPLING

A select group of soil samples were analyzed for TAL Metals and TCLP to determine the hazardous waste characteristics of the Site. The detected TCLP and parent soil sample data are presented in Table A-8 of Appendix A.

4. QUALITY ASSURANCE/QUALITY CONTROL

This section describes the QA/QC findings for the analytical data provided by the supporting laboratories. A complete listing of analyses is presented in the project-specific SAP (EA 2008). The project field samples were collected and sent to three types of laboratory facilities:

- EPA Region 9 Laboratory in Richmond, California
- EPA selected contract laboratories

The following sections present the QA/QC results of the project data by laboratory type.

According to the requirements of the project-specific SAP (EA 2008), the primary responsibility for the validation and review of the data from the EPA laboratories was held by the EPA. A subset of the data was validated from the EPA contract laboratories. Electronic deliverables from EPA selected laboratories and the Region 9 Laboratory contained suitable data validation qualifiers and accompanying case narratives and/or data validation summaries.

In preparing this DESR Addendum II, the available data validation reports and case narratives were reviewed. The QC findings are summarized in the following sections and only address those issues that resulted in the qualification of data. Other minor findings that were deemed insignificant to data quality are discussed in individual reports included in the appendices to this report.

4.1 EPA REGION 9 LABORATORY DATA

The data generated by the EPA Region 9 Laboratory were reviewed in accordance with the laboratory policy. The EPA Region 9 Laboratory performed the following analyses of soil and/or ground water samples:

- Selected metals via TCLP by EPA Method 6010B
- Mercury by EPA Method 245.1
- Inorganics (including sulfate, fluoride, chloride, and bromide) by EPA Method 300.0
- Nitrogen, Total Kjeldahl, by EPA Method 351.2
- Percent Solids by EPA Method 3550C
- Total dissolved solids by Standard Methods for the Examination of Water and Wastewater Method 2540C

The qualifiers and definitions used for the EPA Region 9 Laboratory data are presented in Table 1. The deliverables included appropriate data qualifiers and accompanying data summaries. Appendix B of this DESR Addendum contains the analytical data reports and narratives for the Sample Delivery Group (SDGs) 10124B, 10126B, 10131A, 10131B, and 10134B.

Data generated by the EPA Region 9 Laboratory are subject to a Level 1 data validation. The EPA Region 9 Laboratory data did not require further validation as specified in Section 4.2.1 "Data Validation Responsibilities" of the project-specific SAP (EA 2008). The laboratory reports contained general information regarding data quality. The laboratory rejected no data, so the data were usable as reported. The issues reported in the comments section of the report are summarized below.

- SDG 10124B: The sulfate concentrations for samples BKG-113-0-2, BKG-123-0-2, BKG-126-0-2, BKG-129-0-2, BKG-130-0-2, BKG-930-0-2 were below the quantitation limit, and therefore, were qualified as estimated, “J.”
- SDG 10126B: The nitrogen concentrations for samples ER # 4, MW-05-S, ER # 6, and MW-04-S were below the quantitation limit, and therefore, were qualified as estimated, “J.” The MS/MSD associated with sample GW-999904 did not meet the duplicate precision criteria for nitrogen. The MS/MSD recoveries associated with sample GW-999904 did not meet recovery criteria for nitrogen, either. Because the nitrogen concentration for this sample was non-detect, it was qualified as “U.”
- SDG 10131A: The fluoride concentrations for samples GW-999959 and GW-999931 were below the quantitation limits, and therefore, were qualified as estimated, “J.” The MS/MSD associated with sample GW-999960 did not meet the duplicate precision criteria for nitrogen. The MS/MSD recoveries associated with samples GW-999960 and

GW-999927 did not meet recovery criteria for nitrogen. Because the nitrogen concentration for both these samples were non-detect, they were qualified as "U."

- SDG 10131B: The sulfate concentrations in samples BKG-136-0-2, BKG-137-0-2, and BKG-139-0-2 were below quantitation limits, and therefore, were qualified as estimated, "J." The chromium concentrations in samples TCLP-12-0-0_5, TCLP-2-0-0_5, and TCLP-3-0-0_5 were below quantitation limits, and therefore, were qualified as estimated, "J." The mercury concentrations in samples TCLP-5-0-0_5, TCLP-8-0-0_5, and TCLP-11-0-0_5 were below quantitation limits, and therefore, were qualified as estimated, "J." The lead concentration in sample TCLP-4-0-0_5 was below quantitation limits, and therefore, was qualified as estimated, "J." The barium concentration in sample TCLP-7-0-0_5 was below quantitation limits, and therefore, was qualified as estimated, "J."
- SDG 10134B: The bromide concentration in sample GW-999964 was below quantitation, and therefore, was qualified as estimated, "J."

TABLE 1
DATA VALIDATION QUALIFIERS

Qualifier	Definition
Data Qualifier Definitions for Organic Data Review	
U	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted Contract Required Quantitation Limit (CRQL) for sample and method.
J	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due to either the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the CRQL).
UJ	The analyte was not detected at a level greater than or equal to the adjusted CRQL. However, the reported adjusted CRQL is approximate and may be inaccurate or imprecise.
Data Qualifier Definitions for Inorganic Data Review	
U	The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
L	Indicates results which fall below the CRQL. Results are estimated and are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of detection.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting quality control criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Note:
CRQL Contract required quantitation limit

4.2 EPA CONTRACTOR LABORATORY DATA

A Tier 3 validation was performed on a subset of the data generated by the EPA selected contract laboratories. The selected laboratories were CompuChem-Liberty Analytical Corp. (LIBRTY), ALS Laboratory Group (DATAC), and Bonner Analytical Testing Company (BONNER). Data from CLP laboratories are validated by EPA's Environmental Services Assistance Team according to the National Functional Guidelines for Inorganic Data Review (EPA 2004). For this data, 20% of the data packages go through Level 3 validation and the remaining 80% go through Level 1 (EPA 2001). Data validated by EPA is summarized in data validation reports. The following analyses for soil, sediment, and/or water samples were included in the validated data:

- Metals and cyanide by EPA CLP SOW for Inorganic Analyses, Multi-Media, Multi-Concentration (ILM05.4).

The qualifiers and definitions used for the EPA contractor laboratory data are presented in Table 1. The deliverables included appropriate data qualifiers and accompanying data summaries. Appendix C of this DESR Addendum contains the data validation reports for the following SDGs: MY6835, MY6789, MY6783, MY6768, MY69S5, MY69N1, MY69D3, MY68H2, MY68E5, MY67Y5, MY6B40, MY6AQ0, MY6AD9, MY69S5, MY6728, and MY6AA8.

The issues reported in the data validation reports are summarized below.

- SDG MY6835

  The following results are reported as non-detected (U) due to low level preparation blank (PBW) contamination.

  - Sodium in all samples except MY6846 through MY6850

  Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Sodium	PBW	108

  The following results are estimated and flagged "J" or "UJ" because sample concentrations of iron exceed the concentrations in the interelement check sample (ICS).

- Cadmium in all samples except MY6837
- Lead in samples MY6835 through MY6838, MY6841, MY6842, MY6843, MY6848, MY6853, and MY6854
- Selenium in samples MY6846, MY6848, and MY6850 through MY6854
- Thallium in samples MY6850 through MY6854

Results for the analytes listed above were reported from undiluted analyses that contained iron at concentrations that exceed 120% of the ICSAB solution concentration. Therefore, the instrument applied interelement correction (IEC) factors may not compensate sufficiently for the interference. The results for cadmium and lead may be biased high and false positives may exist. However, the results for selenium and thallium may be biased low and false negatives may exist.

The following results are estimated and flagged "J" because matrix spike recovery results are outside method QC limits.

- Antimony, arsenic, and lead in all samples

The matrix spike recovery results for QC sample MY6835S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	18	-82
Arsenic	55	-45
Lead	24	-76

Results above the MDL are considered quantitatively uncertain. Results reported for antimony, arsenic, and lead in all samples may be biased low.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY6835A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	90
Arsenic	111
Lead	112

Since the post-digestion spike recovery results were acceptable for antimony, arsenic, and lead, the low pre-digestion spike recovery results may indicate poor laboratory technique or matrix effects which may interfere with accurate analysis.

A comparison of field duplicate pair results indicates the following relative percent difference (RPD) exceeds the 35 RPD laboratory criterion for precision.

Analyte	MY6835 (D1) mg/kg	MY6836 (D1) mg/kg	RPD
Arsenic	23.4	16.0	38

- SDG MY6789

The following results are reported as non-detected (U) due to low level preparation blank (PBW) and continuing calibration (CCB) contamination.

- Iron in sample MY67D6
- Zinc in samples MY6789, MY67A5, MY67D6, and MY6BM0

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, µg/L
Iron	CCB17	17.1
Zinc	PBW	5.0

The following results are estimated and flagged "J" in Table 1A because a laboratory duplicate result is outside method QC limits.

- Iron in samples MY6789, MY6793, MY6BM0, MY6BM1, and MY6BM8

Laboratory duplicate results of sample MY6BM1D do not meet the ≤ 20 relative percent difference (RPD) for water criterion for precision as listed below.

Analyte	Laboratory Duplicate, RPD
Iron	22

The following results are estimated and flagged "J" in Table 1A because a matrix spike recovery result is outside method QC limits.

- Iron in samples MY6BM1 and MY6BM8

The matrix spike recovery result for QC sample MY6BM1S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Iron	259	+159

Results above the MDL are considered quantitatively uncertain. Results reported for iron in the samples listed above may be biased high.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY6BM1A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Iron	94

The following results are estimated and flagged "J" in Table 1A because an ICP serial dilution result is outside method QC limits.

- Potassium in samples MY6789, MY6793, MY6BM0, MY6BM1, and MY6BM8

The percent difference for the ICP serial dilution analysis of sample MY6BM1L did not meet the ±10% difference criterion for the analytes shown below.

Analyte	% Difference
Potassium	-11

Results reported for potassium in the samples listed above are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The potassium result for the diluted sample was lower than the original. Therefore, the reported potassium results may be biased high.

A comparison of field duplicate pair results indicates the following relative percent difference (RPD) exceeds the 20 RPD laboratory criterion for precision.

Analyte	MY6BM1(D1) µg/L	MY6BM8 (D1) µg/L	RPD
Iron	893	539	49

- SDG MY6783

  The following results are reported as non-detected (U) due to low level preparation blank (PBW) or continuing calibration blank (CCB) contamination.

  - Aluminum in samples MY6781, MY6790, and MY6BM3
  - Antimony in all samples except MY6783, MY67A7, and MY67D7
  - Arsenic in samples MY6783, MY6790, MY6792, MY6794, MY6BL8, MY6BM2, MY6BM3, MY6BM9, MY67A7, and MY67D7
  - Barium in samples MY6783, MY6BL9, MY6BM3, MY6BM7, and MY67D7
  - Cadmium in sample MY6783
  - Calcium in samples MY67A7 and MY67D7
  - Chromium in samples MY6794, MY6795, and MY6BM9

- Cobalt in sample MY6792 and MY6BL8
- Copper in samples MY6783, MY6792, MY6794, MY6BL8, MY6BM2, and MY6BN0
- Iron in samples MY6781, MY6783, MY6788, MY6790, MY6794, MY6BL8, MY6BM3, MY6BM5, and MY67A7
- Manganese in samples MY6781, MY6783, MY6788, MY6790, MY6794, MY6BM4, and MY6BM9
- Nickel in samples MY6790, MY6BM3, and MY6BM4
- Selenium in all samples except MY67A7 and MY67D7
- Thallium in samples MY6781, MY6783, MY6790, MY6792, MY6BL9, MY6BM7, and MY67A7

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, µg/L
Aluminum	PBW	37.4
Antimony	CCB2 and CCB4	2.2 and 2.7
Arsenic	PBW	2.1
Barium	PBW	1.3
Cadmium	CCB1 and CCB4	0.20 and 0.24
Calcium	PBW	58.9
Chromium	CCB1 and CCB2	0.91 and 0.93
Cobalt	CCB2 and CCB4	0.88 and 0.73
Copper	CCB1 and CCB3	0.77 and 0.67
Iron	PBW	12.628
Manganese	PBW	0.92
Nickel	CCB2 and CCB4	1.2 and 0.81
Selenium	CCB2 and CCB4	2.8 and 3.2

Thallium	PBW	1.3

The following results are estimated and flagged "J" or "UJ" because laboratory duplicate results are outside method QC limits.

- Copper in all samples except MY67A7 and MY67D7

Laboratory duplicate results of sample MY6BM3D do not meet the ± two times CRQL absolute difference criterion for precision as listed below.

Analyte	Laboratory Duplicate Absolute Difference, µg/L	CRQL, µg/L
Copper	71.1	25.0

The following results are estimated and flagged "J" or "UJ" in Table 1A because matrix spike recovery results are outside method QC limits.

- Chromium, cobalt, copper, lead, nickel, silver, and zinc in all samples except MY67A7 and MY67D7

The matrix spike recovery result for barium in QC sample MY6BM3S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Chromium	73	-27
Cobalt	73	-27
Copper	50	-50
Lead	65	-35
Nickel	74	-26
Silver	72	-28
Zinc	69	-31

Results above the MDL are considered quantitatively uncertain. Results reported for analytes in the samples listed above may be biased low.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes (except silver) fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY6BM3A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Chromium	96
Cobalt	93
Copper	100
Lead	93
Nickel	98
Zinc	96

- SDG MY6768

The following results are reported as non-detected (U) due to low level preparation blank (PBW) or field blank (FB) contamination.

- Mercury in sample MY6779
- Zinc in samples MY6768, MY6769, and MY6773

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, µg/L
Mercury	PBW (5-16-2010)	0.10
Zinc	MY67D2 (FB)	6.8

The following results are estimated and flagged "J" in Table 1A because an ICP serial dilution result is outside method QC limits.

- Potassium in samples MY6768 through MY6776, MY6778, MY6779, MY6780, MY6782, and MY6787

The percent difference for the ICP serial dilution analysis of sample MY6779L did not meet the ±10% difference criterion for potassium as shown below.

Analyte	% Difference
Potassium	-19

Results reported for potassium in the samples listed above are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The potassium result for the diluted sample was lower than the original. Therefore, the reported sample results for potassium may be biased high.

- SDG MY69S5

The following results are reported as non-detected (U) in Table 1A due to low level preparation blank (PBW) or continuing calibration blank (CCB) contamination.

- Antimony in samples MY69S8 and MY69W5
- Mercury in samples MY69S6, MY69S7, MY69S8, MY69S9, MY69T9, and MY69W0 through MY69W5

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Antimony	PBW	0.21
Mercury	CCB1 and CCB4	0.014 and 0.019

The following results are estimated and flagged "J" because sample concentrations of iron exceed the concentrations in the interelement check sample (ICS).

- Arsenic in all samples

Results for arsenic were reported from undiluted analyses that contained iron at concentrations that exceed 120% of the ICSAB solution concentration. Therefore, the instrument applied interelement correction (IEC) factors may not

compensate sufficiently for the interference. The results for arsenic may be biased low.

The following results are estimated and flagged "J" because laboratory duplicate results are outside method QC limits.

- Aluminum, barium, calcium, chromium, copper, lead, potassium, and zinc in all samples

Laboratory duplicate results of sample MY69S5D do not meet the ≤ 35 relative percent difference (RPD) for soil criterion for precision as listed below.

Analyte	Laboratory Duplicate, RPD
Aluminum	37
Barium	47
Calcium	65
Chromium	48
Copper	59
Lead	42
Potassium	36
Zinc	39

The following results are estimated and flagged "J" because matrix spike recovery results are outside method QC limits.

- Antimony, arsenic, copper, and zinc in all samples

The matrix spike recovery results for QC sample MY69S5S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	28	-72
Arsenic	67	-33

Copper	54	-46
Zinc	63	-37

Results above the MDL are considered quantitatively uncertain. Results reported for analytes listed above in all samples may be biased low.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY69S5A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	95
Arsenic	93
Copper	101
Zinc	88

A comparison of field duplicate pair results indicates the following relative percent differences (RPDs) exceed the 35 RPD laboratory criterion for precision.

Analyte	MY69S5 (D1) mg/kg	MY69S6 (D1) mg/kg	RPD
Calcium	21300	32300	41

Analyte	MY69T6 (D2) mg/kg	MY69T7 (D2) mg/kg	RPD
Copper	187	72.2	89

- SDG MY69N1

The following results are reported as non-detected (U) due to low level preparation blank (PBS) or continuing calibration blank (CCB) contamination.

- Cadmium in samples MY69N1 through MY69N9 and MY69W6
- Silver in samples MY69N1, MY69N3, MY69N4, MY69N8, MY69T5, MY69W6, MY69X7, MY69Y8, MY69Z9, and MY6A43

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Cadmium	CCB2 and CCB3	0.028 and 0.051
Silver	PBS and CCB3	0.039 and 0.044

The following results are estimated and flagged "J" because matrix spike recovery results are outside method QC limits.

- Antimony, arsenic, copper, and lead in all samples

The matrix spike recovery results for QC sample MY69N1S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	29	-71
Arsenic	139	+39
Copper	131	+31
Lead	145	+45

Results above the MDL are considered quantitatively uncertain. Results reported for antimony in all samples may be biased low. However, results reported for arsenic, copper, and lead in all samples may be biased high.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike

must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY69N1A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	93
Arsenic	85
Copper	87
Lead	77

The following results are estimated and flagged "J" because ICP serial dilution results are outside method QC limits.

- Nickel and zinc in all samples

The percent difference for the ICP serial dilution analysis of sample MY69N1L did not meet the ±10% difference criterion for the analytes shown below.

Analyte	% Difference
Nickel	+17
Zinc	+14

Results reported for analytes listed above in all samples are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The results for the diluted sample were higher than the original. Therefore, the reported sample results may be biased low.

- SDG MY69D3

The following results are reported as non-detected (U) due to low level continuing calibration blank (CCB) contamination.

- Silver in samples MY69D3, MY69D4, MY69D6, MY69D7, MY69D8, MY69E1, and MY69E2

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Silver	CCB2	0.038

The following results are estimated and flagged "J" or "UJ" because sample concentrations of iron exceed the concentrations in the interelement check sample (ICS).

- Arsenic in all samples
- Thallium in sample MY69E1

Results for arsenic and thallium were reported from undiluted analyses that contained iron at concentrations that exceed 120% of the ICSAB solution concentration. Therefore, the instrument applied interelement correction (IEC) factors may not compensate sufficiently for the interference. The results for arsenic and thallium may be biased low and false negatives may exist.

The following results are estimated and flagged "J" because matrix spike recovery results are outside method QC limits.

- Antimony, arsenic, and selenium in all samples

The matrix spike recovery results for QC sample MY69D3S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	14	-86
Arsenic	142	+42
Selenium	70	-30

Results above the MDL are considered quantitatively uncertain. Results reported for antimony and selenium in all samples may be biased low. However, results reported for arsenic in all samples may be biased high.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike

must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY69D3A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	95
Arsenic	93
Selenium	90

The following results are estimated and flagged "J" because an ICP serial dilution result is outside method QC limits.

- Lead in all samples

The percent difference for the ICP serial dilution analysis of sample MY69D3L did not meet the ±10% difference criterion for the analytes shown below.

Analyte	% Difference
Lead	+11

Results reported for lead in all samples are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The result for the diluted sample was higher than the original. Therefore, the reported sample results may be biased low.

- SDG MY68H2

The following results are reported as non-detected (U) due to low level preparation blank (PBS) contamination.

- Sodium in all samples except MY68J9

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Sodium	PBS	99.6

The following results are estimated and flagged "J" because sample concentrations of iron exceed the concentrations in the interelement check sample (ICS).

- Cadmium in all samples
- Selenium and thallium in sample MY68H6

Results for cadmium, selenium, and thallium were reported from undiluted analyses that contained iron at concentrations that exceed 120% of the ICSAB solution concentration. Therefore, the instrument applied interelement correction (IEC) factors may not compensate sufficiently for the interference. The results for cadmium may be biased high and false positives may exist. However, the results for selenium and thallium in sample MY68H6 may be biased low and false negatives may exist.

The following results are estimated and flagged "J" because laboratory duplicate results are outside method QC limits.

- Arsenic, chromium, copper, iron, manganese, and nickel in all samples

Laboratory duplicate results of sample MY68H8D do not meet the ≤ 35 relative percent difference (RPD) for soil criterion for precision as listed below.

Analyte	Laboratory Duplicate, RPD
Arsenic	62
Chromium	54
Copper	39
Iron	36
Manganese	38
Nickel	41

The following results are estimated and flagged "J" in Table 1A because a matrix spike recovery result is outside method QC limits.

- Antimony in all samples

The matrix spike recovery result for QC sample MY68H8S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	11	-89

Results above the MDL are considered quantitatively uncertain. Results reported for antimony in all samples may be biased low.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY68H8A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	84

The following results are estimated and flagged "J" in Table 1A because ICP serial dilution results are outside method QC limits.

- Arsenic and potassium in all samples

The percent difference for the ICP serial dilution analysis of sample MY68H8L did not meet the ±10% difference criterion for the analytes shown below.

Analyte	% Difference
Arsenic	+12
Potassium	-13

Results reported for the analytes listed above in all samples are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The arsenic result for the diluted sample was higher than the original. Therefore, the reported arsenic results may be biased low. However,

since the potassium result for the diluted sample was lower than the original, the reported potassium results may be biased high.

A comparison of field duplicate pair results indicates the following relative percent difference (RPD) exceeds the 35 RPD laboratory criterion for precision.

Analyte	MY68H8 (D1) mg/kg	MY68H9 (D1) mg/kg	RPD
Arsenic	39.1	23.4	50
Manganese	986	642	42

Analyte	MY68J9 (D2) mg/kg	MY68K0 (D2) mg/kg	RPD
Arsenic	241	111	74
Cadmium	2.7	1.5	57
Lead	275	133	70
Mercury	1.7	0.30	140
Zinc	914	482	62

- SDG MY68E5

The following results are reported as non-detected (U) due to low level preparation blank (PBW) contamination.

- Sodium in all samples except MY68E7

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Sodium	PBW	109

The following results are estimated and flagged "J" in Table 1A because sample concentrations of iron exceed the concentrations in the interelement check sample (ICS).

- Cadmium in all samples

Results for cadmium were reported from undiluted analyses that contained iron at concentrations that exceed 120% of the ICSAB solution concentration. Therefore, the instrument applied interelement correction (IEC) factors may not compensate sufficiently for the interference. The results for cadmium may be biased high and false positives may exist.

The following results are estimated and flagged "J" because laboratory duplicate results are outside method QC limits.

- Lead and mercury in all samples

Laboratory duplicate results of sample MY68E5D do not meet the ≤ 35 relative percent difference (RPD) for soil criterion for precision as listed below.

Analyte	Laboratory Duplicate, RPD
Lead	53
Mercury	41

The following results are estimated and flagged "J", "J+", or "UJ" because matrix spike recovery results are outside method QC limits.

- Antimony, arsenic, copper, manganese, mercury, and thallium in all samples

The matrix spike recovery results for QC sample MY68E5S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	18	-82
Arsenic	230	+130
Copper	736	+636

Manganese	61	-39
Mercury	132	+32
Thallium	74	-26

Results above the MDL are considered quantitatively uncertain. Results reported for antimony, manganese, and thallium in all samples may be biased low. However, results reported for arsenic, copper, and mercury may be biased high.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY68E5A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	87
Arsenic	110
Copper	95
Manganese	93
Thallium	65

The following results are estimated and flagged "J" because an ICP serial dilution result is outside method QC limits.

- Potassium in all samples

The percent difference for the ICP serial dilution analysis of sample MY68E5L did not meet the ±10% difference criterion for potassium as shown below.

Analyte	% Difference
Potassium	-19

Results reported for potassium in the samples listed above are considered quantitatively uncertain. Chemical and physical interferences may exist due to

sample matrix effects. The potassium result for the diluted sample was lower than the original. Therefore, the reported sample results for potassium may be biased high.

A comparison of field duplicate pair results indicates the following relative percent difference (RPD) exceeds the 35 RPD laboratory criterion for precision.

Analyte	MY68F6 (D2) mg/kg	MY68F7 (D2) mg/kg	RPD
Calcium	5360	8060	40

Since sampling variability is included in the measurement, field duplicate results are expected to vary more than laboratory duplicates. The effect on data quality is not known.

- SDG MY67Y5

The following results are reported as non-detected (U) due to low level preparation blank (PBW) or continuing calibration blank (CCB) contamination.

- Antimony in samples MY67Y5 through MY67Y8, MY67Z0, MY67Z1, MY67Z3 through MY67Z8, MY6802, and MY6804
- Selenium in samples MY67Y5 through MY67Z0, MY67Z2 through MY67Z6, MY67Z8 through MY6800, and MY6802 through MY6804
- Sodium in all samples except MY67Z4

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Antimony	PBW	1.2
Selenium	CCB4 (5/21/2010)	0.26
Selenium	CCB1 (5/22/2010)	0.19
Sodium	PBW	39.5

The following results are estimated and flagged "J" in Table 1A because sample concentrations of iron exceed the concentrations in the interelement check sample (ICS).

- Cadmium, selenium, and thallium in all samples

Results for the analytes listed above were reported from undiluted analyses that contained iron at concentrations that exceed 120% of the ICSAB solution concentration. Therefore, the instrument applied interelement correction (IEC) factors may not compensate sufficiently for the interference. The results for cadmium and thallium may be biased high and false positives may exist. However, the results for selenium may be biased low and false negatives may exist.

The following results are estimated and flagged "J" because laboratory duplicate results are outside method QC limits.

- Manganese in all samples

Laboratory duplicate results of sample MY67Z1D do not meet the ≤ 35 relative percent difference (RPD) for soil criterion for precision as listed below.

Analyte	Laboratory Duplicate, RPD
Manganese	46

The following results are estimated and flagged "J", "J+", or "UJ" because matrix spike recovery results are outside method QC limits.

- Antimony, selenium, copper, silver, and zinc in all samples

The matrix spike recovery results for QC sample MY67Z1S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	7	-93
Selenium	63	-37
Silver	53	-47

Zinc	73	-27

Results above the MDL are considered quantitatively uncertain. Results reported for the analytes listed above in all samples may be biased low.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY67Z1A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	79
Selenium	70
Silver	87
Zinc	69

The following results are estimated and flagged "J" because an ICP serial dilution result is outside method QC limits.

- Lead, manganese, potassium in all samples

The percent difference for the ICP serial dilution analysis of sample MY67Y5L did not meet the ±10% difference criterion for potassium as shown below.

Analyte	% Difference
Lead	+15
Manganese	+11
Potassium	-14

Results reported for the analytes listed above in all samples are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The lead and manganese results for the diluted sample were higher than the original. Therefore, the reported lead and manganese results

may be biased low. However, since the potassium result for the diluted sample was lower than the original, the reported potassium results may be biased high.

A comparison of field duplicate pair results indicates the following relative percent difference (RPD) exceeds the 35 RPD laboratory criterion for precision.

Analyte	MY6802 (D2) mg/kg	MY6803 (D2) mg/kg	RPD
Lead	32.8	50.1	42

- SDG MY6B40

The following results are estimated and flagged "J" because laboratory duplicate results are outside method QC limits.

- Calcium and magnesium in all samples

Laboratory duplicate results of sample MY6B98D do not meet the ≤ 35 relative percent difference (RPD) for soil criterion for precision as listed below.

Analyte	Laboratory Duplicate, RPD
Calcium	63
Magnesium	66

The following results are estimated and flagged "J" or "UJ" because matrix spike recovery results are outside method QC limits.

- Antimony, copper, and selenium in all samples

The matrix spike recovery results for QC sample MY6B98S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	-4	-104
Copper	127	+27

Selenium	71	-29

Results above the MDL are considered quantitatively uncertain. Results reported for antimony and selenium in all samples may be biased low. However, results for copper may be biased high.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY6B98A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	99
Copper	2
Selenium	94

The following results are estimated and flagged "J" because ICP serial dilution results are outside method QC limits.

- Cadmium, iron, and magnesium in all samples

The percent difference for the ICP serial dilution analysis of sample MY6B98L did not meet the ±10% difference criterion for the analytes shown below.

Analyte	% Difference
Cadmium	-36
Iron	+13
Magnesium	+11

Results reported for analytes listed above in all samples are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The cadmium result for the diluted sample was lower than the original. Therefore, the reported cadmium sample results may be biased high. However, iron and magnesium results for the diluted sample were higher than the

original. Therefore, the reported iron and magnesium sample results may be biased low.

A comparison of field duplicate pair results indicates the following relative percent difference (RPD) exceeds the 35 RPD laboratory criterion for precision.

Analyte	MY6BA9 (D1) mg/kg	MY6BB0 (D1) mg/kg	RPD
Calcium	12400	17800	36
Mercury	4.7	3.0	44

- SDG MY6AQ0

The following results are reported as non-detected (U) due to low level continuing calibration blank (CCB) contamination.

- Cadmium in samples MY6AQ1, MY6AQ6, MY6AR1, MY6AR3 through MY6AR5, and MY6AR9
- Sodium in samples MY6AQ0, MY6AQ1, and MY6AR3 through MY6AR5

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Cadmium	CCB2 and CCB4	0.044 and 0.048
Sodium	CCB2 and CCB3	13.0 and 13.7

The following results are estimated and flagged "UJ" because sample concentrations of iron exceed the concentrations in the interelement check sample (ICS).

- Selenium in samples MY6AQ0 through MY6AQ3, MY6AQ5 and MY6AR6
- Silver in all samples

Results for the analytes listed above were reported from undiluted analyses that contained iron at concentrations that exceed 120% of the ICSAB solution concentration. Therefore, the instrument applied interelement correction (IEC)

factors may not compensate sufficiently for the interference. The results for selenium and silver may be biased low and false negatives may exist.

The following results are estimated and flagged "J+" or "UJ" because matrix spike recovery results are outside method QC limits.

- Antimony, arsenic, and selenium in all samples

The matrix spike recovery results for QC sample MY6AQ2S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	9	-91
Arsenic	726	+626
Selenium	56	-44

Results above the MDL are considered quantitatively uncertain. Results reported for antimony and selenium in all samples may be biased low. However, results for arsenic may be biased high.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY6AQ2A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	100
Arsenic	127
Selenium	60

The following results are estimated and flagged "J" because ICP serial dilution results are outside method QC limits.

- Aluminum, arsenic, barium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel, potassium, sodium, vanadium, and zinc in all samples

The percent difference for the ICP serial dilution analysis of sample MY6AC1L did not meet the ±10% difference criterion for the analytes shown below.

Analyte	% Difference
Aluminum	-24
Arsenic	-95
Barium	-24
Calcium	-22
Chromium	-100
Cobalt	-100
Copper	-97
Iron	-18
Lead	-100
Magnesium	-22
Manganese	-22
Nickel	-98
Potassium	-21
Sodium	+55
Vanadium	-23
Zinc	-100

Results reported for analytes listed above in all samples are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The sodium result for the diluted sample was higher than the original. Therefore, the reported sodium results may be biased low. However, since the aluminum, arsenic, barium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel, potassium, vanadium, and zinc

results for the diluted sample were lower than the original, the reported sample results may be biased high.

A comparison of field duplicate pair results indicates the following relative percent difference (RPD) exceeds the 35 RPD laboratory criterion for precision.

Analyte	MY6AR3 (D2) mg/kg	MY6AR4 (D2) mg/kg	RPD
Lead	22.4	15.3	38

- SDG MY6AD9

The following results are reported as non-detected (U) in due to low level preparation blank (PBW) contamination.

- Cyanide in all samples

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Cyanide	PBW	0.21

The following results are estimated and flagged "UJ" because sample concentrations of iron exceed the concentrations in the interelement check sample (ICS).

- Selenium in samples MY6AD9, MY6AF7, and MY6AF8
- Silver in all samples

Results for the analytes listed above were reported from undiluted analyses that contained iron at concentrations that exceed 120% of the ICSAB solution concentration. Therefore, the instrument applied interelement correction (IEC) factors may not compensate sufficiently for the interference. The results for selenium and silver may be biased low and false negatives may exist.

The following results are estimated and flagged "J" or "UJ" because matrix spike recovery results are outside method QC limits.

- Antimony and selenium in all samples

The matrix spike recovery results for QC sample MY6AE3S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	16	-84
Selenium	73	-37

Results above the MDL are considered quantitatively uncertain. Results reported for antimony and selenium in all samples may be biased low.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY6AE3A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	95
Selenium	74

The following results are estimated and flagged "J" because ICP serial dilution results are outside method QC limits.

- Aluminum, arsenic, barium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel, potassium, vanadium, and zinc in all samples

The percent difference for the ICP serial dilution analysis of sample MY6AE3L did not meet the ±10% difference criterion for the analytes shown below.

Analyte	% Difference
Aluminum	-30
Arsenic	-36
Barium	-30

Cadmium	-38
Calcium	-29
Chromium	-34
Cobalt	-34
Copper	-38
Iron	-27
Lead	-33
Magnesium	-28
Manganese	-29
Nickel	-35
Potassium	-29
Vanadium	-39
Zinc	-33

Results reported for analytes listed above in all samples are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The results for the diluted sample were lower than the original. Therefore, the reported sample results may be biased high.

A comparison of field duplicate pair results indicates the following relative percent difference (RPD) exceeds the 35 RPD laboratory criterion for precision.

Analyte	MY6AF4 (D2) mg/kg	MY6AF5 (D2) mg/kg	RPD
Lead	35.5	69.8	65

In addition, an absolute difference of 0.26 mg/kg was obtained for mercury in the analysis of field duplicate pair samples MY6AF4 and MY6AF5 and exceeds the ± 2 times the CRQL absolute difference criterion for precision.

- SDG MY69S5

The following results are reported as non-detected (U) due to low level preparation blank (PBW) or continuing calibration blank (CCB) contamination.

- Antimony in samples MY69S8 and MY69W5
- Mercury in samples MY69S6, MY69S7, MY69S8, MY69S9, MY69T9, and MY69W0 through MY69W5

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Antimony	PBW	0.21
Mercury	CCB1 and CCB4	0.014 and 0.019

The following results are estimated and flagged "J" because sample concentrations of iron exceed the concentrations in the interelement check sample (ICS).

- Arsenic in all samples

Results for arsenic were reported from undiluted analyses that contained iron at concentrations that exceed 120% of the ICSAB solution concentration. Therefore, the instrument applied interelement correction (IEC) factors may not compensate sufficiently for the interference. The results for arsenic may be biased low.

The following results are estimated and flagged "J" because laboratory duplicate results are outside method QC limits.

- Aluminum, barium, calcium, chromium, copper, lead, potassium, and zinc in all samples

Laboratory duplicate results of sample MY69S5D do not meet the ≤ 35 relative percent difference (RPD) for soil criterion for precision as listed below.

Analyte	Laboratory Duplicate, RPD
Aluminum	37

Barium	47
Calcium	65
Chromium	48
Copper	59
Lead	42
Potassium	36
Zinc	39

The following results are estimated and flagged "J" because matrix spike recovery results are outside method QC limits.

- Antimony, arsenic, copper, and zinc in all samples

The matrix spike recovery results for QC sample MY69S5S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	28	-72
Arsenic	67	-33
Copper	54	-46
Zinc	63	-37

Results above the MDL are considered quantitatively uncertain. Results reported for analytes listed above in all samples may be biased low.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY69S5A were obtained.

Analyte	Post-Digestion Spike, % Recovery

Antimony	95
Arsenic	93
Copper	101
Zinc	88

A comparison of field duplicate pair results indicates the following relative percent differences (RPDs) exceed the 35 RPD laboratory criterion for precision.

Analyte	MY69S5 (D1) mg/kg	MY69S6 (D1) mg/kg	RPD
Calcium	21300	32300	41

Analyte	MY69T6 (D2) mg/kg	MY69T7 (D2) mg/kg	RPD
Copper	187	72.2	89

- SDG MY6728

  The following results are reported as non-detected (U) due to low level preparation blank (PBW) or equipment blank (EB) contamination.

  - Beryllium in all samples
  - Sodium in all samples except MY6747

  Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Beryllium	MY6797 (EB)	0.084
Sodium	PBW	31.6

The following results are estimated and flagged "J" or "UJ" because sample concentrations of iron exceed the concentrations in the interelement check sample (ICS).

- Cadmium, lead, and selenium in all samples
- Thallium in samples MY6734, MY6736, MY6737, MY6740, and MY6742 through MY6746

Results for the analytes listed above were reported from undiluted analyses that contained iron at concentrations that exceed 120% of the ICSAB solution concentration. Therefore, the instrument applied interelement correction (IEC) factors may not compensate sufficiently for the interference. The results for cadmium and lead may be biased high and false positives may exist. However, the results for selenium and thallium may be biased low and false negatives may exist.

The following results are estimated and flagged "J" or "UJ" because matrix spike recovery results are outside method QC limits.

- Antimony, copper, and selenium in all samples

The matrix spike recovery results for QC sample MY6747S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	16	-84
Copper	135	+35
Selenium	67	-33

Results above the MDL are considered quantitatively uncertain. Results reported for antimony and selenium in all samples may be biased low. However, results reported for copper may be biased high.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY6747A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	85
Copper	96
Selenium	81

The following results are estimated and flagged "J" because ICP serial dilution results are outside method QC limits.

- Arsenic, calcium, iron, lead, magnesium, nickel, and zinc in all samples

The percent difference for the ICP serial dilution analysis of sample MY6747L did not meet the ±10% difference criterion for the analytes shown below.

Analyte	% Difference
Arsenic	12
Calcium	12
Iron	12
Lead	15
Magnesium	11
Nickel	11
Zinc	14

Results reported for analytes listed above in all samples are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The results for the diluted sample were higher than the original. Therefore, the reported sample results may be biased low.

A comparison of field duplicate pair results indicates the following relative percent difference (RPD) exceeds the 35 RPD laboratory criterion for precision.

Analyte	MY6747 (D1) mg/kg	MY6748 (D1) mg/kg	RPD

Barium	238	373	44
Manganese	947	2470	89

- SDG MY6AA8

The following results are reported as non-detected (U) due to low level preparation blank (PBW) or continuing calibration blank (CCB) contamination.

- Antimony in samples MY6AD2, MY6AD3, and MY6AD4
- Selenium in samples MY6AA8 through MY6AD1

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Antimony	CCB4	0.29
Selenium	PBW	0.50

The following results are estimated and flagged "J" or "UJ" because sample concentrations of iron exceed the concentrations in the interelement check sample (ICS).

- Silver in all samples except MY6AC1 and MY6AC7

Results for the analyte listed above were reported from undiluted analyses that contained iron at concentrations that exceed 120% of the ICSAB solution concentration. Therefore, the instrument applied interelement correction (IEC) factors may not compensate sufficiently for the interference. The results for silver may be biased low and false negatives may exist.

The following results are estimated and flagged "J", "J-", or "UJ" because matrix spike recovery results are outside method QC limits.

- Antimony, arsenic, and mercury in all samples

The matrix spike recovery results for QC sample MY6AC1S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	11	-89
Arsenic	149	+49
Mercury	74	-36

Results above the MDL are considered quantitatively uncertain. Results reported for antimony and mercury in all samples may be biased low. However, results for arsenic may be biased high.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY6AC1A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	100
Arsenic	125

The following results are estimated and flagged "J" because ICP serial dilution results are outside method QC limits.

- Copper and potassium in all samples

The percent difference for the ICP serial dilution analysis of sample MY6AC1L did not meet the ±10% difference criterion for the analytes shown below.

Analyte	% Difference
Copper	-12
Potassium	-18

Results reported for analytes listed above in all samples are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The results for the diluted sample were lower than the original. Therefore, the reported sample results may be biased high.

A comparison of field duplicate pair results indicates the following relative percent difference (RPD) exceeds the 35 RPD laboratory criterion for precision.

Analyte	MY6AC1 (D1) mg/kg	MY6AC2 (D1) mg/kg	RPD
Lead	46.7	70.9	41

5. DATA EVALUATION PARAMETERS

The data were evaluated for acceptable quality and quantity based on the critical indicator parameters, represented by precision, accuracy, completeness, comparability, representativeness, and sensitivity (PARCCS). To the extent possible, EA followed EPA's data quality assessment (DQA) process (EPA 2006a; 2006b). This evaluation helps determine whether limitations should be placed on the data and to verify that the type, quality, and quantity of data that are collected are appropriate for their intended use. The PARCCS parameters were reviewed for the laboratory analytical data results and are discussed in the following sections.

A well-defined QA/QC process is integral to the generation of analytical data of known and documented quality. The QC process includes those activities required during data collection to produce data of sufficient quality to support the decisions that will be made based on the data (e.g., decisions to be made prior to, during, and after Site remedial actions). After environmental data are collected, QA activities focus on evaluating the quality of the data in order to determine the data usability with respect to support for remedial or enforcement decisions. Table 2 presents the acceptance criteria for chemical analyses of laboratory data.

5.1 DATA CATEGORIES

In order to produce data suitable for decision-making, an appropriate analytical technique must be selected. The type of data generated depends on the qualitative and quantitative DQOs developed for a project. Data must be of adequate quality for the decision-making process for which it was collected in order to support decisions made for the project.

Rigorous analytical methods (e.g., EPA CLP methods) are used to generate analyte-specific data. The quality of the data is assured by: (1) using Standard Operating Procedures (SOP) and QC processes during data collection; (2) documented control and traceability of reference standards, calibrations, and instrument performance; and (3) acceptable performance of field and laboratory QC procedures within the defined limits established for these procedures.

TABLE 2
QUALITY ASSURANCE INDICATOR CRITERIA

Indicator Parameter	Analytical Parameter	QC Sample	Acceptance Criteria for Laboratory Analysis
Accuracy (percent recovery)	TAL Metals, mercury, cyanide, and TCLP	MS LCS Blanks [a]	75 to 125 percent recovery 80 to 120 percent recovery Less than CRDL
Precision (RPD)	TAL Metals, mercury, cyanide, and TCLP	MS, MD Field duplicates	20 percent RPD (aqueous) 35 percent RPD (solid) 50 percent RPD
Sensitivity (quantitation limits)	Analytical tests	MS, MD, MSD Field duplicates	Not applicable
Completeness	The objective for data completeness is 90 percent.		
Representativeness	The sampling network analytical methods for this site are designed to provide data that are representative of site conditions.		
Comparability	The use of standard published sampling and analytical methods, and the use of QC samples, will ensure data of known quality. These data can be compared to other data of known quality.		

Notes:

[a] May include method blanks, reagent blanks, instrument blanks, calibration blanks, and other blanks collected in the field (such as field blanks)

CRDL = Contract-required detection limit
CRQL = Contract-required quantitation limit
LCS = Laboratory control sample
MD = Matrix duplicate
MDL = Method detection limit
MS = Matrix spike
MSD = Matrix spike duplicate
QC = Quality control
RPD = Relative percent difference
TAL = Target analyte list
TCLP = Toxicity Characteristic Leaching Procedure

All of the laboratory analyses for samples collected during May 2010 sampling event were conducted by the EPA Region 9 Laboratory and/or an EPA-designated CLP laboratory.

5.2 MEASUREMENT QUALITY OBJECTIVES

Soil analytical results were evaluated in accordance with PARCC parameters to document the quality of the data and to ensure that the data are of sufficient quality to meet the project objectives. Of these PARCC parameters, precision and accuracy were evaluated quantitatively by collecting the QC check samples listed in Table 2.

The sections below describe each of the PARCC parameters and how they were assessed within this project.

5.2.1 Precision

Precision is the degree of mutual agreement between individual measurements of the same property under similar conditions. Usually, combined field and laboratory precision is evaluated

by collecting and analyzing field duplicates and then calculating the variance between the samples, typically as a RPD.

RPD is calculated as follows:

$$\text{RPD} = \frac{|A - B|}{(A + B)/2} \times 100\%$$

where: A = first duplicate concentration
B = second duplicate concentration

Field sampling precision was evaluated by analyzing field duplicate samples. For every 10 samples collected, one blind duplicate sample was collected. Laboratory analytical precision is evaluated by analyzing laboratory duplicates (also called MDs) or MS/MSDs. For this project, MS/MSD and MS/MD samples were generated for analytes. The results of the analysis of each MS/MSD or MS/MD pair were used to calculate the RPD as a measure of lab precision. The RPD acceptance criteria are listed in Table 2.

5.2.2 Accuracy

A program of sample spiking was conducted to evaluate laboratory accuracy. This program includes analysis of the MS and MSD samples, LCSs or blank spikes, surrogate standards, and method blanks. MS and MSD samples were prepared and analyzed at a frequency of 5 percent for soil samples. LCSs or blank spikes are also analyzed at a frequency of 5 percent. Surrogate standards, where available, are added to every sample analyzed for inorganic constituents. The results of the spiked samples are used to calculate the percent recovery for evaluating accuracy.

$$\text{Percent Recovery} = \frac{S - C}{T} \times 100\%$$

where: S = measured spike sample concentration
C = sample concentration
T = true or actual concentration of the spike

5.2.3 Representativeness

Representativeness expresses the degree to which sample data accurately and precisely represent the characteristics of a population, variations in a parameter at a sampling point, or an environmental condition that they are intended to represent. For this project, representative data was obtained through careful selection of sampling locations and analytical parameters. Representative data will also be obtained through proper collection and handling of samples to avoid interference and minimize contamination.

Representativeness of data will also be ensured through the consistent application of established field and laboratory procedures. Field blanks (if appropriate) and laboratory blank samples were evaluated for the presence of contaminants to aid in evaluating the representativeness of sample

results. Data determined to be non-representative, by comparison with existing data, were used only if accompanied by appropriate qualifiers and limits of uncertainty.

The field investigation program, which was outlined in the SAP (EA 2008), was designed to answer the principal study questions from the DQO process as follows:

> ***What are the nature and extent of air, soil, sediment, surface water, and ground water contamination at the AOI?***
>
> ***What are the migration pathways for these contaminants to be transported to other AOIs?***
>
> ***Are concentrations of AOI COPCs significantly greater than background?***
>
> ***What is the potential risk to human health and ecological receptors from exposure to Site related COPCs at the AOIs?***

It is important that the data collected during the field investigation is suitable and sufficient to evaluate the following RI components: source identification, nature and extent determination, migration pathway evaluation, and risk characterization. To this extent, the representativeness of the data was evaluated in Section 5.6.

5.2.4 Completeness

Completeness is a measure of the percentage of project-specific data that are valid. Valid data are obtained when samples are collected and analyzed in accordance with QC procedures outlined in this SAP, and when none of the QC criteria that affect data usability are exceeded. When data validation is completed, the percent completeness value was calculated by dividing the number of useable sample results by the total number of sample results planned for this investigation.

Completeness will also be evaluated as part of the data quality assessment process (EPA 2006a; 2006b). This evaluation will help determine whether limitations are associated with the decisions to be made based on the data collected.

5.2.5 Comparability

Comparability expresses the confidence with which one data set can be compared with another. Comparability of data was achieved by consistently following standard field and laboratory procedures and by using standard measurement units in reporting analytical data. Standard EPA analytical methods and QC were used to support the comparability of analytical results with those obtained in other testing. Calibrations were performed in accordance with EPA or manufacturer's specifications and were checked with the frequency specified in the EPA CLP SOW(s).

5.3 DETECTION AND QUANTITATION LIMITS

The analytical parameters and their quantitation limits for use on this project are determined under the EPA CLP SOW(s). The contract-required detection limit (CRDL) is the minimum concentration of an analyte that can be reliably distinguished from background noise for a specific analytical method. The quantitation limit represents the lowest concentration of an analyte that can be accurately and reproducibly quantified in a sample matrix. CRQLs are contractually specified maximum quantitation limits for specific analytical methods and sample matrices, such as soil or water, and are typically several times the MDL to allow for matrix effects.

For this project, analytical methods have been selected so that the CRQL for each target analyte is below the applicable regulatory screening criteria, wherever practical. For this project, samples results were reported as estimated values if concentrations are less than CRQLs but greater than CRDLs. The CRDL for each analyte was listed as the detection limit in the laboratory's electronic data deliverable.

5.4 PRECISION

Precision is the measure of the variability associated with the entire sampling and analysis process. It is the comparison among independent measurements as the result of repeated application of the same process under similar conditions. Precision may be determined by analyzing field duplicate pairs, MS/MSD pairs, and laboratory replicate pairs, and is expressed as the RPD of a pair of values (or results). The acceptance criteria for each analytical methodology are presented in the SAP (EA 2008). Duplicate results were evaluated for compliance with acceptance criteria for precision for each analytical method. RPD evaluations are documented in individual data validation report for each SDG which was validated for MS/MSD and laboratory replicate pairs. A summary of the surface water, ground water, and soil samples collected in May 2010 is presented in Appendix A. The field duplicate RPD evaluations for detected analytes are presented in the individual data validation reports as well as in Appendix D. In addition, primary COPCs (i.e., lead and arsenic) are presented in a bar-chart graphical form so that the level of agreement can be visually evaluated for duplicate pairs of samples. For field duplicate results less than five times the CRQL, the CRQL is shown as the QC limit rather than an RPD limit.

The criteria in the SAP specifies that 1 in 10 (10 percent) of sample matrices be submitted as field duplicates to the laboratory (EA 2008). Field duplicate pairs were collected, analyzed, and evaluated for each matrix. The field duplicate frequency by matrix is shown in Table 3. The overall field project frequency is 9.4 percent. The individual frequencies of field duplicate pairs submitted to the laboratory for analysis are provided in Table 3. The SAP criterion for field duplicate precision is 50 percent RPD or as shown in the EPA CLP SOW as applicable. Field duplicates exhibited poor precision for a limited number of target analytes. The exceedances may also indicate heterogeneity and the uneven distribution of contaminants in the matrix rather than a shortfall in reproducibility in the sampling and analysis process.

TABLE 3
FIELD DUPLICATE FREQUENCY

Matrix	Samples	Field Duplicates	Frequency (%)
Ground Water	56	11	19.6
Surface Soil/Sediment	1362	122	9.0

5.5 ACCURACY

Accuracy is the degree to which a measurement agrees with its true value and is expressed as percent recovery; acceptance criteria for each analytical methodology are stated in the SAP (EA 2008). By comparing MS, LCS, and surrogate recoveries to associated QC limits, accuracy is assessed. Through the process of data validation and review, MS, LCS, and surrogate recoveries were evaluated for compliance with acceptance criteria for accuracy for each applicable analytical methodology. The evaluations of percent recovery are documented in Appendix B and Appendix C.

5.6 REPRESENTATIVENESS

Representativeness is a qualitative parameter and is defined by the degree to which data accurately and precisely represents a characteristic of a population, parameter variations at a sampling point, or a process or environmental condition. Sample results were evaluated for representativeness by examining items related to sample collection, including chain-of-custody documentation, sample labeling, collection dates, and condition of the samples upon receipt at the laboratory. Laboratory procedures were also examined, including anomalies reported by the laboratory, either upon receipt of the samples at the laboratory or during analytical processes; adherence to recommended holding times of samples prior to analysis; calibration of laboratory instruments; adherence to analytical methods; and completeness of data package documentation. Any item that may have adversely affected the representativeness of the sample result is documented in the data validation narratives.

All samples were analyzed within the holding times specified by the methods. Equipment blanks, calibration blanks, and preparation blank results were evaluated during the data validation or review process to determine whether equipment decontamination procedures (equipment rinsate) or laboratory conditions (preparation or calibration blanks) affected sample results. Low level blank contamination was reported for most metals. The analytical results for the laboratory method blanks are discussed in Section 4 for each analysis.

The field investigation program, which was outlined in the SAP (EA 2008), was designed to answer the principal study questions from the DQO process as follows:

What are the nature and extent of air, soil, sediment, surface water, and ground water contamination at the AOI?

What are the migration pathways for these contaminants to be transported to other AOIs?

Are concentrations of AOI COPCs significantly greater than background?

What is the potential risk to human health and ecological receptors from exposure to Site related COPCs at the AOIs?

It is important that the data collected during the field investigation is suitable and sufficient to evaluate the following RI components: source identification, nature and extent determination, migration pathway evaluation, and risk characterization.

To satisfy these sampling goals biased/judgmental sample locations were selected. The biased/judgmental sample locations were selected based on historical site evidence (e.g., photographic documentation, previous sampling results, etc.) or visual cues during the Site reconnaissance.

An evaluation of spatial distribution and sample density is an inexact science that is often subject to opinion and conjecture. Datasets inherently have some level of uncertainty with regards to the representativeness of the characterization. Although the level of uncertainty varies from area to area, the acceptable level of uncertainty is often individualistic. Essentially, there is a delicate balance between expending additional effort to characterize an area and the necessity for additional data to reduce uncertainty in the dataset.

To evaluate the robustness of the dataset, all of the data collected by EA were included in this evaluation. Two criteria were utilized in a semi-quantitative weight-of-evidence evaluation:

- Is sampling sufficient to: (1) determine the nature and extent of contamination; (2) calculate an exposure point concentration for risk assessment; (3) and evaluate whether COPCs are significantly greater than background? The SAP (EA 2008) states that statistical approaches will be consistent with EPA guidance, including ProUCL 4.0 User Guide (Singh, Singh, and Maichle 2007). This guidance recommends that a minimum of 8 to 10 samples is necessary for a dataset. All of the datasets in Appendix A met these criteria.

- Is the spatial distribution and sample density adequate to evaluate the nature and extent of contamination and complete the migration pathway analyses? The evaluation also requires some professional judgment and is largely a weight-of-evidence evaluation. To evaluate these criteria, sample locations were plotted on figures and evaluated for spatial distribution and sample density. This evaluation was the focus of the Remedial Investigation Report and was not the subject of this DESR Addendum II.

5.7 COMPLETENESS

Completeness is defined as the percentage of measurements judged to be valid. The validity of sample results is determined through the data validation process. Rejected (R) sample results are considered to be incomplete. The data that are qualified as estimated (J) or estimated nondetected (UJ) are considered to be valid and usable. The completeness is calculated and reported for each method and analyte combination. The number of valid results divided by the number of possible individual analyte results, expressed as a percentage, determines the completeness of the data set.

The percent completeness was acceptable; the summation of 1,412 total results. No data was rejected, resulting in a completeness of 100 percent.

5.8 COMPARABILITY

Comparability of the data is a qualitative parameter that expresses the confidence with which one data set may be compared to another. Comparability of the data is achieved by using standard methods for sampling and analysis, reporting data in standard units, normalizing results to standard conditions, and using standardized reporting formats and data validation procedures. No method substitutions were observed that reduced the quality of the data for comparison purposes.

5.9 SENSITIVITY

Sensitivity is the measure of the signal from an instrument that represents an actual deflection or response above instrument noise. The analytical sensitivity is measured by the method detection limit or instrument detection limit and reported with the necessary dilution factors, preparation factors, and dry-weight factors of an individual sample as the sample quantitation limit.

Ideally, the lowest of the detection limits outlined in Appendix C of the SAP (EA 2008) would be below human health screening levels; however, analytically achievable quantitation limits are not always low enough to meet this goal. Specific known exceptions to the desired detection limits were discussed during the DQO development, as noted in the SAP.

6. DATA QUALITY OBJECTIVES AND CONCLUSIONS

Based on the data validation findings summarized in Section 4, data were either determined to be usable (unqualified or qualified as estimated) or rejected. Rejected data are not usable for investigative purposes, specifically for answering the principal and secondary study questions derived from the project DQOs.

One of the goals of the field investigation and data collection efforts was to obtain results of known quality that can support the RI/FS. Based upon an overall review of the results presented

within this DESR Addendum II, the following issues are of importance in this evaluation.

6.1 CHEMICALS OF POTENTIAL CONCERN TARGETED

Industry-specific wastes, existing site data, and operational history were all considered in development of the Site SAP (EA 2008). Because the SAP set forth the DQOs for the site based on knowledge of past site operations and the findings of the previous investigations, the target chemicals were appropriately analyzed and targeted in the field investigation.

6.2 MEDIA VARIABILITY

The media of concern were surface soil/sediment and ground water. Field QC samples including field duplicates, MS/MSD samples, trip blanks, and equipment rinsates were collected to ensure that measurement error was reduced and to increase general confidence in the analytical results.

6.3 LABORATORY PERFORMANCE PROBLEMS

In general, the laboratory performance met QC limits. Specific problems are presented in Section 4 for a more detailed discussion of any problems.

6.4 CONCLUSIONS

The analytical results for this sampling event met overall project objectives for the quantity and quality of data required to support the decision-making process of this investigation. All of the data were considered acceptable.

Data without qualifiers and data qualified as estimated are usable for purposes in supporting project objectives. Validated data were also found to be representative and comparable for all samples. Precision and accuracy were acceptable.

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Appendix A

Data Summary Tables

Table A-1: Data Groupings

Area of Investigation	Group Code	Sample Group
Ground Water	GW	Ground Water
Off-Site Soil	B1	Background Soil Type 1
Off-Site Soil	OFS-149	Off-site Soil Area 149
Off-Site Soil	OFS-150	Off-site Soil Area 150
Off-Site Soil	OFS-151	Off-site Soil Area 151
Off-Site Soil	OFS-152	Off-site Soil Area 152
Off-Site Soil	OFS-153	Off-site Soil Area 153
Off-Site Soil	OFS-154	Off-site Soil Area 154
Off-Site Soil	OFS-155	Off-site Soil Area 155
Off-Site Soil	OFS-156	Off-site Soil Area 156
Off-Site Soil	OFS-157	Off-site Soil Area 157
Off-Site Soil	OFS-158	Off-site Soil Area 158
Off-Site Soil	OFS-159	Off-site Soil Area 159
Off-Site Soil	OFS-160	Off-site Soil Area 160
Off-Site Soil	OFS-161	Off-site Soil Area 161
Off-Site Soil	OFS-162	Off-site Soil Area 162
Off-Site Soil	OFS-163	Off-site Soil Area 163
Off-Site Soil	OFS-164	Off-site Soil Area 164
Off-Site Soil	OFS-165	Off-site Soil Area 165
Off-Site Soil	OFS-166	Off-site Soil Area 166
Off-Site Soil	OFS-167	Off-site Soil Area 167
Off-Site Soil	OFS-168	Off-site Soil Area 168
Off-Site Soil	OFS-169	Off-site Soil Area 169
Off-Site Soil	OFS-170	Off-site Soil Area 170
Off-Site Soil	OFS-171	Off-site Soil Area 171
Off-Site Soil	OFS-172	Off-site Soil Area 172
Off-Site Soil	OFS-173	Off-site Soil Area 173
Off-Site Soil	OFS-174	Off-site Soil Area 174
Off-Site Soil	OFS-175	Off-site Soil Area 175
Off-Site Soil	OFS-176	Off-site Soil Area 176
Off-Site Soil	OFS-177	Off-site Soil Area 177
Off-Site Soil	OFS-178	Off-site Soil Area 178
Off-Site Soil	OFS-179	Off-site Soil Area 179
Off-Site Soil	OFS-180	Off-site Soil Area 180
Off-Site Soil	OFS-181	Off-site Soil Area 181
Off-Site Soil	OFS-182	Off-site Soil Area 182
Off-Site Soil	OFS-183	Off-site Soil Area 183
Off-Site Soil	OFS-184	Off-site Soil Area 184
Off-Site Soil	OFS-185	Off-site Soil Area 185
Off-Site Soil	OFS-186	Off-site Soil Area 186
Off-Site Soil	OFS-187	Off-site Soil Area 187
Off-Site Soil	OFS-188	Off-site Soil Area 188
Off-Site Soil	OFS-189	Off-site Soil Area 189
Off-Site Soil	OFS-190	Off-site Soil Area 190
Off-Site Soil	OFS-191	Off-site Soil Area 191
Off-Site Soil	OFS-192	Off-site Soil Area 192

Table A-1: Data Groupings

Area of Investigation	Group Code	Sample Group
Off-Site Soil	OFS-193	Off-site Soil Area 193
Off-Site Soil	OFS-194	Off-site Soil Area 194
Off-Site Soil	OFS-195	Off-site Soil Area 195
Off-Site Soil	OFS-196	Off-site Soil Area 196
Off-Site Soil	OFS-197	Off-site Soil Area 197
Off-Site Soil	OFS-198	Off-site Soil Area 198
Off-Site Soil	OFS-199	Off-site Soil Area 199
Off-Site Soil	OFS-200	Off-site Soil Area 200
Off-Site Soil	OFS-201	Off-site Soil Area 201
Off-Site Soil	OFS-202	Off-site Soil Area 202
Off-Site Soil	OFS-203	Off-site Soil Area 203
Off-Site Soil	OFS-204	Off-site Soil Area 204
Off-Site Soil	OFS-205	Off-site Soil Area 205
Off-Site Soil	OFS-206	Off-site Soil Area 206
Off-Site Soil	OFS-207	Off-site Soil Area 207
Off-Site Soil	OFS-208	Off-site Soil Area 208
Off-Site Soil	OFS-209	Off-site Soil Area 209
Off-Site Soil	OFS-210	Off-site Soil Area 210
Off-Site Soil	OFS-211	Off-site Soil Area 211
Off-Site Soil	OFS-212	Off-site Soil Area 212
Off-Site Soil	OFS-213	Off-site Soil Area 213
Off-Site Soil	OFS-214	Off-site Soil Area 214
Off-Site Soil	OFS-215	Off-site Soil Area 215
Off-Site Soil	OFS-216	Off-site Soil Area 216
Off-Site Soil	OFS-217	Off-site Soil Area 217
Off-Site Soil	OFS-218	Off-site Soil Area 218
Off-Site Soil	OFS-219	Off-site Soil Area 219
Off-Site Soil	OFS-220	Off-site Soil Area 220
Off-Site Soil	OFS-221	Off-site Soil Area 221
Off-Site Soil	OFS-222	Off-site Soil Area 222
Off-Site Soil	OFS-223	Off-site Soil Area 223
Off-Site Soil	OFS-224	Off-site Soil Area 224
Off-Site Soil	OFS-225	Off-site Soil Area 225
Off-Site Soil	OFS-226	Off-site Soil Area 226
Off-Site Soil	OFS-227	Off-site Soil Area 227
Off-Site Soil	OFS-228	Off-site Soil Area 228
Off-Site Soil	OFS-229	Off-site Soil Area 229
Off-Site Soil	OFS-230	Off-site Soil Area 230
Off-Site Soil	OFS-231	Off-site Soil Area 231
Off-Site Soil	OFS-232	Off-site Soil Area 232
Off-Site Soil	OFS-233	Off-site Soil Area 233
Off-Site Soil	OFS-234	Off-site Soil Area 234
Off-Site Soil	OFS-235	Off-site Soil Area 235
Off-Site Soil	OFS-236	Off-site Soil Area 236
Off-Site Soil	OFS-237	Off-site Soil Area 237
Off-Site Soil	OFS-238	Off-site Soil Area 238

Table A-1: Data Groupings

Area of Investigation	Group Code	Sample Group
Off-Site Soil	OFS-239	Off-site Soil Area 239
Off-Site Soil	OFS-240	Off-site Soil Area 240
Off-Site Soil	OFS-241	Off-site Soil Area 241
Off-Site Soil	OFS-242	Off-site Soil Area 242
Off-Site Soil	OFS-243	Off-site Soil Area 243
Off-Site Soil	OFS-244	Off-site Soil Area 244
Off-Site Soil	OFS-245	Off-site Soil Area 245
Off-Site Soil	OFS-246	Off-site Soil Area 246
Off-Site Soil	OFS-247	Off-site Soil Area 247
Off-Site Soil	OFS-248	Off-site Soil Area 248
Off-Site Soil	OFS-249	Off-site Soil Area 249
Off-Site Soil	OFS-250	Off-site Soil Area 250
Off-Site Soil	OFS-251	Off-site Soil Area 251
Off-Site Soil	OFS-252	Off-site Soil Area 252
Off-Site Soil	OFS-253	Off-site Soil Area 253
Off-Site Soil	OFS-254	Off-site Soil Area 254
Off-Site Soil	OFS-255	Off-site Soil Area 255
Off-Site Soil	OFS-256	Off-site Soil Area 256
Off-Site Soil	OFS-257	Off-site Soil Area 257
Off-Site Soil	OFS-258	Off-site Soil Area 258
Off-Site Soil	OFS-259	Off-site Soil Area 259
Off-Site Soil	OFS-260	Off-site Soil Area 260
Off-Site Soil	OFS-261	Off-site Soil Area 261
Off-Site Soil	OFS-262	Off-site Soil Area 262
Off-Site Soil	OFS-263	Off-site Soil Area 263
Off-Site Soil	OFS-264	Off-site Soil Area 264
Off-Site Soil	OFS-265	Off-site Soil Area 265
Off-Site Soil	OFS-266	Off-site Soil Area 266
Off-Site Soil	OFS-267	Off-site Soil Area 267
Off-Site Soil	OFS-268	Off-site Soil Area 268
Miscellaneous	TCLP	Toxicity Characteristic Leaching Procedure

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Background Soil Type 1	BKG-111	BKG-111-0-2	0	2		2-May-10	X	
Background Soil Type 1	BKG-112	BKG-112-0-2	0	2		2-May-10	X	
Background Soil Type 1	BKG-113	BKG-113-0-2	0	2		2-May-10	X	
Background Soil Type 1	BKG-114	BKG-114-0-2	0	2		2-May-10	X	
Background Soil Type 1	BKG-115	BKG-115-0-2	0	2		2-May-10	X	
Background Soil Type 1	BKG-116	BKG-116-0-2	0	2		2-May-10	X	
Background Soil Type 1	BKG-117	BKG-117-0-2	0	2		2-May-10	X	
Background Soil Type 1	BKG-118	BKG-118-0-2	0	2		2-May-10	X	
Background Soil Type 1	BKG-119	BKG-119-0-2	0	2		2-May-10	X	
Background Soil Type 1	BKG-120	BKG-120-0-2	0	2		2-May-10	X	
Background Soil Type 1	BKG-121	BKG-121-0-2	0	2		2-May-10	X	
Background Soil Type 1	BKG-122	BKG-122-0-2	0	2		2-May-10	X	
Background Soil Type 1	BKG-123	BKG-123-0-2	0	2		2-May-10	X	
Background Soil Type 1	BKG-124	BKG-124-0-2	0	2		2-May-10	X	
Background Soil Type 1	BKG-125	BKG-125-0-2	0	2		2-May-10	X	
Background Soil Type 1	BKG-126	BKG-126-0-2	0	2		2-May-10	X	
Background Soil Type 1	BKG-127	BKG-127-0-2	0	2		2-May-10	X	
Background Soil Type 1	BKG-128	BKG-128-0-2	0	2		2-May-10	X	
Background Soil Type 1	BKG-129	BKG-129-0-2	0	2		2-May-10	X	
Background Soil Type 1	BKG-130	BKG-130-0-2	0	2		2-May-10	X	
Background Soil Type 1	BKG-131	BKG-131-0-2	0	2		12-May-10	X	
Background Soil Type 1	BKG-132	BKG-132-0-2	0	2		12-May-10	X	
Background Soil Type 1	BKG-133	BKG-133-0-2	0	2		12-May-10	X	
Background Soil Type 1	BKG-134	BKG-134-0-2	0	2		12-May-10	X	
Background Soil Type 1	BKG-135	BKG-135-0-2	0	2		12-May-10	X	
Background Soil Type 1	BKG-136	BKG-136-0-2	0	2		12-May-10	X	
Background Soil Type 1	BKG-137	BKG-137-0-2	0	2		12-May-10	X	
Background Soil Type 1	BKG-138	BKG-138-0-2	0	2		12-May-10	X	
Background Soil Type 1	BKG-139	BKG-139-0-2	0	2		12-May-10	X	
Background Soil Type 1	BKG-140	BKG-140-0-2	0	2		12-May-10	X	
Background Soil Type 1	BKG-930	BKG-930-0-2	0	2	DUP	2-May-10	X	
Background Soil Type 1	BKG-940	BKG-940-0-2	0	2	DUP	12-May-10	X	
Off-site Soil Area 149	OFS-149-1	OFS-149-1	0	0.2		3-May-10	X	
Off-site Soil Area 149	OFS-149-1	OFS-149-1-A	0.8	1		3-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 149	OFS-149-1	OFS-949-1	0	0.2	DUP	3-May-10	X	
Off-site Soil Area 149	OFS-149-2	OFS-149-2	0	0.2		3-May-10	X	
Off-site Soil Area 149	OFS-149-3	OFS-149-3	0	0.2		3-May-10	X	
Off-site Soil Area 149	OFS-149-4	OFS-149-4	0	0.2		3-May-10	X	
Off-site Soil Area 149	OFS-149-5	OFS-149-5	0	0.2		3-May-10	X	
Off-site Soil Area 149	OFS-149-6	OFS-149-6	0	0.2		3-May-10	X	
Off-site Soil Area 149	OFS-149-7	OFS-149-7	0	0.2		3-May-10	X	
Off-site Soil Area 149	OFS-149-8	OFS-149-8	0	0.2		3-May-10	X	
Off-site Soil Area 149	OFS-149-9	OFS-149-9	0	0.2		3-May-10	X	
Off-site Soil Area 150	OFS-150-1	OFS-150-1	0	0.2		3-May-10	X	
Off-site Soil Area 150	OFS-150-1	OFS-150-1-A	0.8	1		3-May-10	X	
Off-site Soil Area 150	OFS-150-1	OFS-950-1	0	0.2	DUP	3-May-10	X	
Off-site Soil Area 150	OFS-150-2	OFS-150-2	0	0.2		3-May-10	X	
Off-site Soil Area 150	OFS-150-3	OFS-150-3	0	0.2		3-May-10	X	
Off-site Soil Area 150	OFS-150-4	OFS-150-4	0	0.2		3-May-10	X	
Off-site Soil Area 150	OFS-150-5	OFS-150-5	0	0.2		3-May-10	X	
Off-site Soil Area 150	OFS-150-6	OFS-150-6	0	0.2		3-May-10	X	
Off-site Soil Area 150	OFS-150-7	OFS-150-7	0	0.2		3-May-10	X	
Off-site Soil Area 150	OFS-150-8	OFS-150-8	0	0.2		3-May-10	X	
Off-site Soil Area 150	OFS-150-9	OFS-150-9	0	0.2		3-May-10	X	
Off-site Soil Area 151	OFS-151-1	OFS-151-1	0	0.2		3-May-10	X	
Off-site Soil Area 151	OFS-151-1	OFS-151-1-A	0.8	1		3-May-10	X	
Off-site Soil Area 151	OFS-151-1	OFS-951-1	0	0.2	DUP	3-May-10	X	
Off-site Soil Area 151	OFS-151-2	OFS-151-2	0	0.2		3-May-10	X	
Off-site Soil Area 151	OFS-151-3	OFS-151-3	0	0.2		3-May-10	X	
Off-site Soil Area 151	OFS-151-4	OFS-151-4	0	0.2		3-May-10	X	
Off-site Soil Area 151	OFS-151-5	OFS-151-5	0	0.2		3-May-10	X	
Off-site Soil Area 151	OFS-151-6	OFS-151-6	0	0.2		3-May-10	X	
Off-site Soil Area 151	OFS-151-7	OFS-151-7	0	0.2		3-May-10	X	
Off-site Soil Area 151	OFS-151-8	OFS-151-8	0	0.2		3-May-10	X	
Off-site Soil Area 151	OFS-151-9	OFS-151-9	0	0.2		3-May-10	X	
Off-site Soil Area 152	OFS-152-1	OFS-152-1	0	0.2		3-May-10	X	
Off-site Soil Area 152	OFS-152-1	OFS-152-1-A	0.8	1		3-May-10	X	
Off-site Soil Area 152	OFS-152-1	OFS-952-1	0	0.2	DUP	3-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 152	OFS-152-2	OFS-152-2	0	0.2		3-May-10	X	
Off-site Soil Area 152	OFS-152-3	OFS-152-3	0	0.2		3-May-10	X	
Off-site Soil Area 152	OFS-152-4	OFS-152-4	0	0.2		3-May-10	X	
Off-site Soil Area 152	OFS-152-5	OFS-152-5	0	0.2		3-May-10	X	
Off-site Soil Area 152	OFS-152-6	OFS-152-6	0	0.2		3-May-10	X	
Off-site Soil Area 152	OFS-152-7	OFS-152-7	0	0.2		3-May-10	X	
Off-site Soil Area 152	OFS-152-8	OFS-152-8	0	0.2		3-May-10	X	
Off-site Soil Area 152	OFS-152-9	OFS-152-9	0	0.2		3-May-10	X	
Off-site Soil Area 153	OFS-153-1	OFS-153-1	0	0.2		3-May-10	X	
Off-site Soil Area 153	OFS-153-1	OFS-153-1-A	0.8	1		3-May-10	X	
Off-site Soil Area 153	OFS-153-1	OFS-953-1	0	0.2	DUP	3-May-10	X	
Off-site Soil Area 153	OFS-153-2	OFS-153-2	0	0.2		3-May-10	X	
Off-site Soil Area 153	OFS-153-3	OFS-153-3	0	0.2		3-May-10	X	
Off-site Soil Area 153	OFS-153-4	OFS-153-4	0	0.2		3-May-10	X	
Off-site Soil Area 153	OFS-153-5	OFS-153-5	0	0.2		3-May-10	X	
Off-site Soil Area 153	OFS-153-6	OFS-153-6	0	0.2		3-May-10	X	
Off-site Soil Area 153	OFS-153-7	OFS-153-7	0	0.2		3-May-10	X	
Off-site Soil Area 153	OFS-153-8	OFS-153-8	0	0.2		3-May-10	X	
Off-site Soil Area 153	OFS-153-9	OFS-153-9	0	0.2		3-May-10	X	
Off-site Soil Area 154	OFS-154-1	OFS-154-1	0	0.2		3-May-10	X	
Off-site Soil Area 154	OFS-154-1	OFS-154-1-A	0.8	1		3-May-10	X	
Off-site Soil Area 154	OFS-154-1	OFS-954-1	0	0.2	DUP	3-May-10	X	
Off-site Soil Area 154	OFS-154-2	OFS-154-2	0	0.2		3-May-10	X	
Off-site Soil Area 154	OFS-154-3	OFS-154-3	0	0.2		3-May-10	X	
Off-site Soil Area 154	OFS-154-4	OFS-154-4	0	0.2		3-May-10	X	
Off-site Soil Area 154	OFS-154-5	OFS-154-5	0	0.2		3-May-10	X	
Off-site Soil Area 154	OFS-154-6	OFS-154-6	0	0.2		3-May-10	X	
Off-site Soil Area 154	OFS-154-7	OFS-154-7	0	0.2		3-May-10	X	
Off-site Soil Area 154	OFS-154-8	OFS-154-8	0	0.2		3-May-10	X	
Off-site Soil Area 154	OFS-154-9	OFS-154-9	0	0.2		3-May-10	X	
Off-site Soil Area 155	OFS-155-1	OFS-155-1	0	0.2		3-May-10	X	
Off-site Soil Area 155	OFS-155-1	OFS-155-1-A	0.8	1		3-May-10	X	
Off-site Soil Area 155	OFS-155-1	OFS-955-1	0	0.2	DUP	3-May-10	X	
Off-site Soil Area 155	OFS-155-2	OFS-155-2	0	0.2		3-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 155	OFS-155-3	OFS-155-3	0	0.2		3-May-10	X	
Off-site Soil Area 155	OFS-155-4	OFS-155-4	0	0.2		3-May-10	X	
Off-site Soil Area 155	OFS-155-5	OFS-155-5	0	0.2		3-May-10	X	
Off-site Soil Area 155	OFS-155-6	OFS-155-6	0	0.2		3-May-10	X	
Off-site Soil Area 155	OFS-155-7	OFS-155-7	0	0.2		3-May-10	X	
Off-site Soil Area 155	OFS-155-8	OFS-155-8	0	0.2		3-May-10	X	
Off-site Soil Area 155	OFS-155-9	OFS-155-9	0	0.2		3-May-10	X	
Off-site Soil Area 156	OFS-156-1	OFS-156-1	0	0.2		4-May-10	X	
Off-site Soil Area 156	OFS-156-1	OFS-156-1-A	0.8	1		4-May-10	X	
Off-site Soil Area 156	OFS-156-1	OFS-956-1	0	0.2	DUP	4-May-10	X	
Off-site Soil Area 156	OFS-156-2	OFS-156-2	0	0.2		4-May-10	X	
Off-site Soil Area 156	OFS-156-3	OFS-156-3	0	0.2		4-May-10	X	
Off-site Soil Area 156	OFS-156-4	OFS-156-4	0	0.2		4-May-10	X	
Off-site Soil Area 156	OFS-156-5	OFS-156-5	0	0.2		4-May-10	X	
Off-site Soil Area 156	OFS-156-6	OFS-156-6	0	0.2		4-May-10	X	
Off-site Soil Area 156	OFS-156-7	OFS-156-7	0	0.2		4-May-10	X	
Off-site Soil Area 156	OFS-156-8	OFS-156-8	0	0.2		4-May-10	X	
Off-site Soil Area 156	OFS-156-9	OFS-156-9	0	0.2		4-May-10	X	
Off-site Soil Area 157	OFS-157-1	OFS-157-1	0	0.2		4-May-10	X	
Off-site Soil Area 157	OFS-157-1	OFS-157-1-A	0.8	1		4-May-10	X	
Off-site Soil Area 157	OFS-157-1	OFS-957-1	0	0.2	DUP	4-May-10	X	
Off-site Soil Area 157	OFS-157-2	OFS-157-2	0	0.2		4-May-10	X	
Off-site Soil Area 157	OFS-157-3	OFS-157-3	0	0.2		4-May-10	X	
Off-site Soil Area 157	OFS-157-4	OFS-157-4	0	0.2		4-May-10	X	
Off-site Soil Area 157	OFS-157-5	OFS-157-5	0	0.2		4-May-10	X	
Off-site Soil Area 157	OFS-157-6	OFS-157-6	0	0.2		4-May-10	X	
Off-site Soil Area 157	OFS-157-7	OFS-157-7	0	0.2		4-May-10	X	
Off-site Soil Area 157	OFS-157-8	OFS-157-8	0	0.2		4-May-10	X	
Off-site Soil Area 157	OFS-157-9	OFS-157-9	0	0.2		4-May-10	X	
Off-site Soil Area 158	OFS-158-1	OFS-158-1	0	0.2		4-May-10	X	
Off-site Soil Area 158	OFS-158-1	OFS-158-1-A	0.8	1		4-May-10	X	
Off-site Soil Area 158	OFS-158-1	OFS-958-1	0	0.2	DUP	4-May-10	X	
Off-site Soil Area 158	OFS-158-2	OFS-158-2	0	0.2		4-May-10	X	
Off-site Soil Area 158	OFS-158-3	OFS-158-3	0	0.2		4-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 158	OFS-158-4	OFS-158-4	0	0.2		4-May-10	X	
Off-site Soil Area 158	OFS-158-5	OFS-158-5	0	0.2		4-May-10	X	
Off-site Soil Area 158	OFS-158-6	OFS-158-6	0	0.2		4-May-10	X	
Off-site Soil Area 158	OFS-158-7	OFS-158-7	0	0.2		4-May-10	X	
Off-site Soil Area 158	OFS-158-8	OFS-158-8	0	0.2		4-May-10	X	
Off-site Soil Area 158	OFS-158-9	OFS-158-9	0	0.2		4-May-10	X	
Off-site Soil Area 159	OFS-159-1	OFS-159-1	0	0.2		4-May-10	X	
Off-site Soil Area 159	OFS-159-1	OFS-159-1-A	0.8	1		4-May-10	X	
Off-site Soil Area 159	OFS-159-1	OFS-959-1	0	0.2	DUP	4-May-10	X	
Off-site Soil Area 159	OFS-159-2	OFS-159-2	0	0.2		4-May-10	X	
Off-site Soil Area 159	OFS-159-3	OFS-159-3	0	0.2		4-May-10	X	
Off-site Soil Area 159	OFS-159-4	OFS-159-4	0	0.2		4-May-10	X	
Off-site Soil Area 159	OFS-159-5	OFS-159-5	0	0.2		4-May-10	X	
Off-site Soil Area 159	OFS-159-6	OFS-159-6	0	0.2		4-May-10	X	
Off-site Soil Area 159	OFS-159-7	OFS-159-7	0	0.2		4-May-10	X	
Off-site Soil Area 159	OFS-159-8	OFS-159-8	0	0.2		4-May-10	X	
Off-site Soil Area 159	OFS-159-9	OFS-159-9	0	0.2		4-May-10	X	
Off-site Soil Area 160	OFS-160-1	OFS-160-1	0	0.2		4-May-10	X	
Off-site Soil Area 160	OFS-160-1	OFS-160-1-A	0.8	1		4-May-10	X	
Off-site Soil Area 160	OFS-160-1	OFS-960-1	0	0.2	DUP	4-May-10	X	
Off-site Soil Area 160	OFS-160-2	OFS-160-2	0	0.2		4-May-10	X	
Off-site Soil Area 160	OFS-160-3	OFS-160-3	0	0.2		4-May-10	X	
Off-site Soil Area 160	OFS-160-4	OFS-160-4	0	0.2		4-May-10	X	
Off-site Soil Area 160	OFS-160-5	OFS-160-5	0	0.2		4-May-10	X	
Off-site Soil Area 160	OFS-160-6	OFS-160-6	0	0.2		4-May-10	X	
Off-site Soil Area 160	OFS-160-7	OFS-160-7	0	0.2		4-May-10	X	
Off-site Soil Area 160	OFS-160-8	OFS-160-8	0	0.2		4-May-10	X	
Off-site Soil Area 160	OFS-160-9	OFS-160-9	0	0.2		4-May-10	X	
Off-site Soil Area 161	OFS-161-1	OFS-161-1	0	0.2		4-May-10	X	
Off-site Soil Area 161	OFS-161-1	OFS-161-1-A	0.8	1		4-May-10	X	
Off-site Soil Area 161	OFS-161-1	OFS-961-1	0	0.2	DUP	4-May-10	X	
Off-site Soil Area 161	OFS-161-2	OFS-161-2	0	0.2		4-May-10	X	
Off-site Soil Area 161	OFS-161-3	OFS-161-3	0	0.2		4-May-10	X	
Off-site Soil Area 161	OFS-161-4	OFS-161-4	0	0.2		4-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 161	OFS-161-5	OFS-161-5	0	0.2		4-May-10	X	
Off-site Soil Area 161	OFS-161-6	OFS-161-6	0	0.2		4-May-10	X	
Off-site Soil Area 161	OFS-161-7	OFS-161-7	0	0.2		4-May-10	X	
Off-site Soil Area 161	OFS-161-8	OFS-161-8	0	0.2		4-May-10	X	
Off-site Soil Area 161	OFS-161-9	OFS-161-9	0	0.2		4-May-10	X	
Off-site Soil Area 162	OFS-162-1	OFS-162-1	0	0.2		4-May-10	X	
Off-site Soil Area 162	OFS-162-1	OFS-162-1-A	0.8	1		4-May-10	X	
Off-site Soil Area 162	OFS-162-1	OFS-962-1	0	0.2	DUP	4-May-10	X	
Off-site Soil Area 162	OFS-162-2	OFS-162-2	0	0.2		4-May-10	X	
Off-site Soil Area 162	OFS-162-3	OFS-162-3	0	0.2		4-May-10	X	
Off-site Soil Area 162	OFS-162-4	OFS-162-4	0	0.2		4-May-10	X	
Off-site Soil Area 162	OFS-162-5	OFS-162-5	0	0.2		4-May-10	X	
Off-site Soil Area 162	OFS-162-6	OFS-162-6	0	0.2		4-May-10	X	
Off-site Soil Area 162	OFS-162-7	OFS-162-7	0	0.2		4-May-10	X	
Off-site Soil Area 162	OFS-162-8	OFS-162-8	0	0.2		4-May-10	X	
Off-site Soil Area 162	OFS-162-9	OFS-162-9	0	0.2		4-May-10	X	
Off-site Soil Area 163	OFS-163-1	OFS-163-1	0	0.2		4-May-10	X	
Off-site Soil Area 163	OFS-163-1	OFS-163-1-A	0.8	1		4-May-10	X	
Off-site Soil Area 163	OFS-163-1	OFS-963-1	0	0.2	DUP	4-May-10	X	
Off-site Soil Area 163	OFS-163-2	OFS-163-2	0	0.2		4-May-10	X	
Off-site Soil Area 163	OFS-163-3	OFS-163-3	0	0.2		4-May-10	X	
Off-site Soil Area 163	OFS-163-4	OFS-163-4	0	0.2		4-May-10	X	
Off-site Soil Area 163	OFS-163-5	OFS-163-5	0	0.2		4-May-10	X	
Off-site Soil Area 163	OFS-163-6	OFS-163-6	0	0.2		4-May-10	X	
Off-site Soil Area 163	OFS-163-7	OFS-163-7	0	0.2		4-May-10	X	
Off-site Soil Area 163	OFS-163-8	OFS-163-8	0	0.2		4-May-10	X	
Off-site Soil Area 163	OFS-163-9	OFS-163-9	0	0.2		4-May-10	X	
Off-site Soil Area 164	OFS-164-1	OFS-164-1	0	0.2		4-May-10	X	
Off-site Soil Area 164	OFS-164-1	OFS-164-1-A	0.8	1		4-May-10	X	
Off-site Soil Area 164	OFS-164-1	OFS-964-1	0	0.2	DUP	4-May-10	X	
Off-site Soil Area 164	OFS-164-2	OFS-164-2	0	0.2		4-May-10	X	
Off-site Soil Area 164	OFS-164-3	OFS-164-3	0	0.2		4-May-10	X	
Off-site Soil Area 164	OFS-164-4	OFS-164-4	0	0.2		4-May-10	X	
Off-site Soil Area 164	OFS-164-5	OFS-164-5	0	0.2		4-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 164	OFS-164-6	OFS-164-6	0	0.2		4-May-10	X	
Off-site Soil Area 164	OFS-164-7	OFS-164-7	0	0.2		4-May-10	X	
Off-site Soil Area 164	OFS-164-8	OFS-164-8	0	0.2		4-May-10	X	
Off-site Soil Area 164	OFS-164-9	OFS-164-9	0	0.2		4-May-10	X	
Off-site Soil Area 165	OFS-165-1	OFS-165-1	0	0.2		4-May-10	X	
Off-site Soil Area 165	OFS-165-1	OFS-165-1-A	0.8	1		4-May-10	X	
Off-site Soil Area 165	OFS-165-1	OFS-965-1	0	0.2	DUP	4-May-10	X	
Off-site Soil Area 165	OFS-165-2	OFS-165-2	0	0.2		4-May-10	X	
Off-site Soil Area 165	OFS-165-3	OFS-165-3	0	0.2		4-May-10	X	
Off-site Soil Area 165	OFS-165-4	OFS-165-4	0	0.2		4-May-10	X	
Off-site Soil Area 165	OFS-165-5	OFS-165-5	0	0.2		4-May-10	X	
Off-site Soil Area 165	OFS-165-6	OFS-165-6	0	0.2		4-May-10	X	
Off-site Soil Area 165	OFS-165-7	OFS-165-7	0	0.2		4-May-10	X	
Off-site Soil Area 165	OFS-165-8	OFS-165-8	0	0.2		4-May-10	X	
Off-site Soil Area 165	OFS-165-9	OFS-165-9	0	0.2		4-May-10	X	
Off-site Soil Area 166	OFS-166-1	OFS-166-1	0	0.2		5-May-10	X	
Off-site Soil Area 166	OFS-166-1	OFS-166-1-A	0.8	1		5-May-10	X	
Off-site Soil Area 166	OFS-166-1	OFS-966-1	0	0.2	DUP	5-May-10	X	
Off-site Soil Area 166	OFS-166-2	OFS-166-2	0	0.2		5-May-10	X	
Off-site Soil Area 166	OFS-166-3	OFS-166-3	0	0.2		5-May-10	X	
Off-site Soil Area 166	OFS-166-4	OFS-166-4	0	0.2		5-May-10	X	
Off-site Soil Area 166	OFS-166-5	OFS-166-5	0	0.2		5-May-10	X	
Off-site Soil Area 166	OFS-166-6	OFS-166-6	0	0.2		5-May-10	X	
Off-site Soil Area 166	OFS-166-7	OFS-166-7	0	0.2		5-May-10	X	
Off-site Soil Area 166	OFS-166-8	OFS-166-8	0	0.2		5-May-10	X	
Off-site Soil Area 166	OFS-166-9	OFS-166-9	0	0.2		5-May-10	X	
Off-site Soil Area 167	OFS-167-1	OFS-167-1	0	0.2		5-May-10	X	
Off-site Soil Area 167	OFS-167-1	OFS-167-1-A	0.8	1		5-May-10	X	
Off-site Soil Area 167	OFS-167-1	OFS-967-1	0	0.2	DUP	5-May-10	X	
Off-site Soil Area 167	OFS-167-2	OFS-167-2	0	0.2		5-May-10	X	
Off-site Soil Area 167	OFS-167-3	OFS-167-3	0	0.2		5-May-10	X	
Off-site Soil Area 167	OFS-167-4	OFS-167-4	0	0.2		5-May-10	X	
Off-site Soil Area 167	OFS-167-5	OFS-167-5	0	0.2		5-May-10	X	
Off-site Soil Area 167	OFS-167-6	OFS-167-6	0	0.2		5-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 167	OFS-167-7	OFS-167-7	0	0.2		5-May-10	X	
Off-site Soil Area 167	OFS-167-8	OFS-167-8	0	0.2		5-May-10	X	
Off-site Soil Area 167	OFS-167-9	OFS-167-9	0	0.2		5-May-10	X	
Off-site Soil Area 168	OFS-168-1	OFS-168-1	0	0.2		4-May-10	X	
Off-site Soil Area 168	OFS-168-1	OFS-168-1-A	0.8	1		4-May-10	X	
Off-site Soil Area 168	OFS-168-1	OFS-968-1	0	0.2	DUP	4-May-10	X	
Off-site Soil Area 168	OFS-168-2	OFS-168-2	0	0.2		4-May-10	X	
Off-site Soil Area 168	OFS-168-3	OFS-168-3	0	0.2		4-May-10	X	
Off-site Soil Area 168	OFS-168-4	OFS-168-4	0	0.2		4-May-10	X	
Off-site Soil Area 168	OFS-168-5	OFS-168-5	0	0.2		4-May-10	X	
Off-site Soil Area 168	OFS-168-6	OFS-168-6	0	0.2		4-May-10	X	
Off-site Soil Area 168	OFS-168-7	OFS-168-7	0	0.2		4-May-10	X	
Off-site Soil Area 168	OFS-168-8	OFS-168-8	0	0.2		4-May-10	X	
Off-site Soil Area 168	OFS-168-9	OFS-168-9	0	0.2		4-May-10	X	
Off-site Soil Area 169	OFS-169-1	OFS-169-1	0	0.2		5-May-10	X	
Off-site Soil Area 169	OFS-169-1	OFS-169-1-A	0.8	1		5-May-10	X	
Off-site Soil Area 169	OFS-169-1	OFS-969-1	0	0.2	DUP	5-May-10	X	
Off-site Soil Area 169	OFS-169-2	OFS-169-2	0	0.2		5-May-10	X	
Off-site Soil Area 169	OFS-169-3	OFS-169-3	0	0.2		5-May-10	X	
Off-site Soil Area 169	OFS-169-4	OFS-169-4	0	0.2		5-May-10	X	
Off-site Soil Area 169	OFS-169-5	OFS-169-5	0	0.2		5-May-10	X	
Off-site Soil Area 169	OFS-169-6	OFS-169-6	0	0.2		5-May-10	X	
Off-site Soil Area 169	OFS-169-7	OFS-169-7	0	0.2		5-May-10	X	
Off-site Soil Area 169	OFS-169-8	OFS-169-8	0	0.2		5-May-10	X	
Off-site Soil Area 169	OFS-169-9	OFS-169-9	0	0.2		5-May-10	X	
Off-site Soil Area 170	OFS-170-1	OFS-170-1	0	0.2		5-May-10	X	
Off-site Soil Area 170	OFS-170-1	OFS-170-1-A	0.8	1		5-May-10	X	
Off-site Soil Area 170	OFS-170-1	OFS-970-1	0	0.2	DUP	5-May-10	X	
Off-site Soil Area 170	OFS-170-2	OFS-170-2	0	0.2		5-May-10	X	
Off-site Soil Area 170	OFS-170-3	OFS-170-3	0	0.2		5-May-10	X	
Off-site Soil Area 170	OFS-170-4	OFS-170-4	0	0.2		5-May-10	X	
Off-site Soil Area 170	OFS-170-5	OFS-170-5	0	0.2		5-May-10	X	
Off-site Soil Area 170	OFS-170-6	OFS-170-6	0	0.2		5-May-10	X	
Off-site Soil Area 170	OFS-170-7	OFS-170-7	0	0.2		5-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 170	OFS-170-8	OFS-170-8	0	0.2		5-May-10	X	
Off-site Soil Area 170	OFS-170-9	OFS-170-9	0	0.2		5-May-10	X	
Off-site Soil Area 171	OFS-171-1	OFS-171-1	0	0.2		5-May-10	X	
Off-site Soil Area 171	OFS-171-1	OFS-171-1-A	0.8	1		5-May-10	X	
Off-site Soil Area 171	OFS-171-1	OFS-971-1	0	0.2	DUP	5-May-10	X	
Off-site Soil Area 171	OFS-171-2	OFS-171-2	0	0.2		5-May-10	X	
Off-site Soil Area 171	OFS-171-3	OFS-171-3	0	0.2		5-May-10	X	
Off-site Soil Area 171	OFS-171-4	OFS-171-4	0	0.2		5-May-10	X	
Off-site Soil Area 171	OFS-171-5	OFS-171-5	0	0.2		5-May-10	X	
Off-site Soil Area 171	OFS-171-6	OFS-171-6	0	0.2		5-May-10	X	
Off-site Soil Area 171	OFS-171-7	OFS-171-7	0	0.2		5-May-10	X	
Off-site Soil Area 171	OFS-171-8	OFS-171-8	0	0.2		5-May-10	X	
Off-site Soil Area 171	OFS-171-9	OFS-171-9	0	0.2		5-May-10	X	
Off-site Soil Area 172	OFS-172-1	OFS-172-1	0	0.2		5-May-10	X	
Off-site Soil Area 172	OFS-172-1	OFS-172-1-A	0.8	1		5-May-10	X	
Off-site Soil Area 172	OFS-172-1	OFS-972-1	0	0.2	DUP	5-May-10	X	
Off-site Soil Area 172	OFS-172-2	OFS-172-2	0	0.2		5-May-10	X	
Off-site Soil Area 172	OFS-172-3	OFS-172-3	0	0.2		5-May-10	X	
Off-site Soil Area 172	OFS-172-4	OFS-172-4	0	0.2		5-May-10	X	
Off-site Soil Area 172	OFS-172-5	OFS-172-5	0	0.2		5-May-10	X	
Off-site Soil Area 172	OFS-172-6	OFS-172-6	0	0.2		5-May-10	X	
Off-site Soil Area 172	OFS-172-7	OFS-172-7	0	0.2		5-May-10	X	
Off-site Soil Area 172	OFS-172-8	OFS-172-8	0	0.2		5-May-10	X	
Off-site Soil Area 172	OFS-172-9	OFS-172-9	0	0.2		5-May-10	X	
Off-site Soil Area 173	OFS-173-1	OFS-173-1	0	0.2		5-May-10	X	
Off-site Soil Area 173	OFS-173-1	OFS-173-1-A	0.8	1		5-May-10	X	
Off-site Soil Area 173	OFS-173-1	OFS-973-1	0	0.2	DUP	5-May-10	X	
Off-site Soil Area 173	OFS-173-2	OFS-173-2	0	0.2		5-May-10	X	
Off-site Soil Area 173	OFS-173-3	OFS-173-3	0	0.2		5-May-10	X	
Off-site Soil Area 173	OFS-173-4	OFS-173-4	0	0.2		5-May-10	X	
Off-site Soil Area 173	OFS-173-5	OFS-173-5	0	0.2		5-May-10	X	
Off-site Soil Area 173	OFS-173-6	OFS-173-6	0	0.2		5-May-10	X	
Off-site Soil Area 173	OFS-173-7	OFS-173-7	0	0.2		5-May-10	X	
Off-site Soil Area 173	OFS-173-8	OFS-173-8	0	0.2		5-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 173	OFS-173-9	OFS-173-9	0	0.2		5-May-10	X	
Off-site Soil Area 174	OFS-174-1	OFS-174-1	0	0.2		5-May-10	X	
Off-site Soil Area 174	OFS-174-1	OFS-174-1-A	0.8	1		5-May-10	X	
Off-site Soil Area 174	OFS-174-1	OFS-974-1	0	0.2	DUP	5-May-10	X	
Off-site Soil Area 174	OFS-174-2	OFS-174-2	0	0.2		5-May-10	X	
Off-site Soil Area 174	OFS-174-3	OFS-174-3	0	0.2		5-May-10	X	
Off-site Soil Area 174	OFS-174-4	OFS-174-4	0	0.2		5-May-10	X	
Off-site Soil Area 174	OFS-174-5	OFS-174-5	0	0.2		5-May-10	X	
Off-site Soil Area 174	OFS-174-6	OFS-174-6	0	0.2		5-May-10	X	
Off-site Soil Area 174	OFS-174-7	OFS-174-7	0	0.2		5-May-10	X	
Off-site Soil Area 174	OFS-174-8	OFS-174-8	0	0.2		5-May-10	X	
Off-site Soil Area 174	OFS-174-9	OFS-174-9	0	0.2		5-May-10	X	
Off-site Soil Area 175	OFS-175-1	OFS-175-1	0	0.2		5-May-10	X	
Off-site Soil Area 175	OFS-175-1	OFS-175-1-A	0.8	1		5-May-10	X	
Off-site Soil Area 175	OFS-175-1	OFS-975-1	0	0.2	DUP	5-May-10	X	
Off-site Soil Area 175	OFS-175-2	OFS-175-2	0	0.2		5-May-10	X	
Off-site Soil Area 175	OFS-175-3	OFS-175-3	0	0.2		5-May-10	X	
Off-site Soil Area 175	OFS-175-4	OFS-175-4	0	0.2		5-May-10	X	
Off-site Soil Area 175	OFS-175-5	OFS-175-5	0	0.2		5-May-10	X	
Off-site Soil Area 175	OFS-175-6	OFS-175-6	0	0.2		5-May-10	X	
Off-site Soil Area 175	OFS-175-7	OFS-175-7	0	0.2		5-May-10	X	
Off-site Soil Area 175	OFS-175-8	OFS-175-8	0	0.2		5-May-10	X	
Off-site Soil Area 175	OFS-175-9	OFS-175-9	0	0.2		5-May-10	X	
Off-site Soil Area 176	OFS-176-1	OFS-176-1	0	0.2		6-May-10	X	
Off-site Soil Area 176	OFS-176-1	OFS-176-1-A	0.8	1		6-May-10	X	
Off-site Soil Area 176	OFS-176-1	OFS-976-1	0	0.2	DUP	6-May-10	X	
Off-site Soil Area 176	OFS-176-2	OFS-176-2	0	0.2		6-May-10	X	
Off-site Soil Area 176	OFS-176-3	OFS-176-3	0	0.2		6-May-10	X	
Off-site Soil Area 176	OFS-176-4	OFS-176-4	0	0.2		6-May-10	X	
Off-site Soil Area 176	OFS-176-5	OFS-176-5	0	0.2		6-May-10	X	
Off-site Soil Area 176	OFS-176-6	OFS-176-6	0	0.2		6-May-10	X	
Off-site Soil Area 176	OFS-176-7	OFS-176-7	0	0.2		6-May-10	X	
Off-site Soil Area 176	OFS-176-8	OFS-176-8	0	0.2		6-May-10	X	
Off-site Soil Area 176	OFS-176-9	OFS-176-9	0	0.2		6-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 177	OFS-177-1	OFS-177-1	0	0.2		6-May-10	X	
Off-site Soil Area 177	OFS-177-1	OFS-177-1-A	0.8	1		6-May-10	X	
Off-site Soil Area 177	OFS-177-1	OFS-977-1	0	0.2	DUP	6-May-10	X	
Off-site Soil Area 177	OFS-177-2	OFS-177-2	0	0.2		6-May-10	X	
Off-site Soil Area 177	OFS-177-3	OFS-177-3	0	0.2		6-May-10	X	
Off-site Soil Area 177	OFS-177-4	OFS-177-4	0	0.2		6-May-10	X	
Off-site Soil Area 177	OFS-177-5	OFS-177-5	0	0.2		6-May-10	X	
Off-site Soil Area 177	OFS-177-6	OFS-177-6	0	0.2		6-May-10	X	
Off-site Soil Area 177	OFS-177-7	OFS-177-7	0	0.2		6-May-10	X	
Off-site Soil Area 177	OFS-177-8	OFS-177-8	0	0.2		6-May-10	X	
Off-site Soil Area 177	OFS-177-9	OFS-177-9	0	0.2		6-May-10	X	
Off-site Soil Area 178	OFS-178-1	OFS-178-1	0	0.2		5-May-10	X	
Off-site Soil Area 178	OFS-178-1	OFS-178-1-A	0.8	1		5-May-10	X	
Off-site Soil Area 178	OFS-178-1	OFS-978-1	0	0.2	DUP	5-May-10	X	
Off-site Soil Area 178	OFS-178-2	OFS-178-2	0	0.2		5-May-10	X	
Off-site Soil Area 178	OFS-178-3	OFS-178-3	0	0.2		5-May-10	X	
Off-site Soil Area 178	OFS-178-4	OFS-178-4	0	0.2		5-May-10	X	
Off-site Soil Area 178	OFS-178-5	OFS-178-5	0	0.2		5-May-10	X	
Off-site Soil Area 178	OFS-178-6	OFS-178-6	0	0.2		5-May-10	X	
Off-site Soil Area 178	OFS-178-7	OFS-178-7	0	0.2		5-May-10	X	
Off-site Soil Area 178	OFS-178-8	OFS-178-8	0	0.2		5-May-10	X	
Off-site Soil Area 178	OFS-178-9	OFS-178-9	0	0.2		5-May-10	X	
Off-site Soil Area 179	OFS-179-1	OFS-179-1	0	0.2		6-May-10	X	
Off-site Soil Area 179	OFS-179-1	OFS-179-1-A	0.8	1		6-May-10	X	
Off-site Soil Area 179	OFS-179-1	OFS-979-1	0	0.2	DUP	6-May-10	X	
Off-site Soil Area 179	OFS-179-2	OFS-179-2	0	0.2		6-May-10	X	
Off-site Soil Area 179	OFS-179-3	OFS-179-3	0	0.2		6-May-10	X	
Off-site Soil Area 179	OFS-179-4	OFS-179-4	0	0.2		6-May-10	X	
Off-site Soil Area 179	OFS-179-5	OFS-179-5	0	0.2		6-May-10	X	
Off-site Soil Area 179	OFS-179-6	OFS-179-6	0	0.2		6-May-10	X	
Off-site Soil Area 179	OFS-179-7	OFS-179-7	0	0.2		6-May-10	X	
Off-site Soil Area 179	OFS-179-8	OFS-179-8	0	0.2		6-May-10	X	
Off-site Soil Area 179	OFS-179-9	OFS-179-9	0	0.2		6-May-10	X	
Off-site Soil Area 180	OFS-180-1	OFS-180-1	0	0.2		6-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 180	OFS-180-1	OFS-180-1-A	0.8	1		6-May-10	X	
Off-site Soil Area 180	OFS-180-1	OFS-980-1	0	0.2	DUP	6-May-10	X	
Off-site Soil Area 180	OFS-180-2	OFS-180-2	0	0.2		6-May-10	X	
Off-site Soil Area 180	OFS-180-3	OFS-180-3	0	0.2		6-May-10	X	
Off-site Soil Area 180	OFS-180-4	OFS-180-4	0	0.2		6-May-10	X	
Off-site Soil Area 180	OFS-180-5	OFS-180-5	0	0.2		6-May-10	X	
Off-site Soil Area 180	OFS-180-6	OFS-180-6	0	0.2		6-May-10	X	
Off-site Soil Area 180	OFS-180-7	OFS-180-7	0	0.2		6-May-10	X	
Off-site Soil Area 180	OFS-180-8	OFS-180-8	0	0.2		6-May-10	X	
Off-site Soil Area 180	OFS-180-9	OFS-180-9	0	0.2		6-May-10	X	
Off-site Soil Area 181	OFS-181-1	OFS-181-1	0	0.2		6-May-10	X	
Off-site Soil Area 181	OFS-181-1	OFS-181-1-A	0.8	1		6-May-10	X	
Off-site Soil Area 181	OFS-181-1	OFS-981-1	0	0.2	DUP	6-May-10	X	
Off-site Soil Area 181	OFS-181-2	OFS-181-2	0	0.2		6-May-10	X	
Off-site Soil Area 181	OFS-181-3	OFS-181-3	0	0.2		6-May-10	X	
Off-site Soil Area 181	OFS-181-4	OFS-181-4	0	0.2		6-May-10	X	
Off-site Soil Area 181	OFS-181-5	OFS-181-5	0	0.2		6-May-10	X	
Off-site Soil Area 181	OFS-181-6	OFS-181-6	0	0.2		6-May-10	X	
Off-site Soil Area 181	OFS-181-7	OFS-181-7	0	0.2		6-May-10	X	
Off-site Soil Area 181	OFS-181-8	OFS-181-8	0	0.2		6-May-10	X	
Off-site Soil Area 181	OFS-181-9	OFS-181-9	0	0.2		6-May-10	X	
Off-site Soil Area 182	OFS-182-1	OFS-182-1	0	0.2		6-May-10	X	
Off-site Soil Area 182	OFS-182-1	OFS-182-1-A	0.8	1		6-May-10	X	
Off-site Soil Area 182	OFS-182-1	OFS-982-1	0	0.2	DUP	6-May-10	X	
Off-site Soil Area 182	OFS-182-2	OFS-182-2	0	0.2		6-May-10	X	
Off-site Soil Area 182	OFS-182-3	OFS-182-3	0	0.2		6-May-10	X	
Off-site Soil Area 182	OFS-182-4	OFS-182-4	0	0.2		6-May-10	X	
Off-site Soil Area 182	OFS-182-5	OFS-182-5	0	0.2		6-May-10	X	
Off-site Soil Area 182	OFS-182-6	OFS-182-6	0	0.2		6-May-10	X	
Off-site Soil Area 182	OFS-182-7	OFS-182-7	0	0.2		6-May-10	X	
Off-site Soil Area 182	OFS-182-8	OFS-182-8	0	0.2		6-May-10	X	
Off-site Soil Area 182	OFS-182-9	OFS-182-9	0	0.2		6-May-10	X	
Off-site Soil Area 183	OFS-183-1	OFS-183-1	0	0.2		6-May-10	X	
Off-site Soil Area 183	OFS-183-2	OFS-183-2	0	0.2		6-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 183	OFS-183-3	OFS-183-3	0	0.2		6-May-10	X	
Off-site Soil Area 183	OFS-183-4	OFS-183-4	0	0.2		6-May-10	X	
Off-site Soil Area 183	OFS-183-5	OFS-183-5	0	0.2		6-May-10	X	
Off-site Soil Area 183	OFS-183-6	OFS-183-6	0	0.2		6-May-10	X	
Off-site Soil Area 183	OFS-183-7	OFS-183-7	0	0.2		6-May-10	X	
Off-site Soil Area 183	OFS-183-8	OFS-183-8	0	0.2		6-May-10	X	
Off-site Soil Area 183	OFS-183-9	OFS-183-9	0	0.2		6-May-10	X	
Off-site Soil Area 184	OFS-184-1	OFS-184-1	0	0.2		6-May-10	X	
Off-site Soil Area 184	OFS-184-1	OFS-184-1-A	0.8	1		6-May-10	X	
Off-site Soil Area 184	OFS-184-1	OFS-984-1	0	0.2	DUP	6-May-10	X	
Off-site Soil Area 184	OFS-184-2	OFS-184-2	0	0.2		6-May-10	X	
Off-site Soil Area 184	OFS-184-3	OFS-184-3	0	0.2		6-May-10	X	
Off-site Soil Area 184	OFS-184-4	OFS-184-4	0	0.2		6-May-10	X	
Off-site Soil Area 184	OFS-184-5	OFS-184-5	0	0.2		6-May-10	X	
Off-site Soil Area 184	OFS-184-6	OFS-184-6	0	0.2		6-May-10	X	
Off-site Soil Area 184	OFS-184-7	OFS-184-7	0	0.2		6-May-10	X	
Off-site Soil Area 184	OFS-184-8	OFS-184-8	0	0.2		6-May-10	X	
Off-site Soil Area 184	OFS-184-9	OFS-184-9	0	0.2		6-May-10	X	
Off-site Soil Area 185	OFS-185-1	OFS-185-1	0	0.2		6-May-10	X	
Off-site Soil Area 185	OFS-185-1	OFS-185-1-A	0.8	1		6-May-10	X	
Off-site Soil Area 185	OFS-185-1	OFS-985-1	0	0.2	DUP	6-May-10	X	
Off-site Soil Area 185	OFS-185-2	OFS-185-2	0	0.2		6-May-10	X	
Off-site Soil Area 185	OFS-185-3	OFS-185-3	0	0.2		6-May-10	X	
Off-site Soil Area 185	OFS-185-4	OFS-185-4	0	0.2		6-May-10	X	
Off-site Soil Area 185	OFS-185-5	OFS-185-5	0	0.2		6-May-10	X	
Off-site Soil Area 185	OFS-185-6	OFS-185-6	0	0.2		6-May-10	X	
Off-site Soil Area 185	OFS-185-7	OFS-185-7	0	0.2		6-May-10	X	
Off-site Soil Area 185	OFS-185-8	OFS-185-8	0	0.2		6-May-10	X	
Off-site Soil Area 185	OFS-185-9	OFS-185-9	0	0.2		6-May-10	X	
Off-site Soil Area 186	OFS-186-1	OFS-186-1	0	0.2		6-May-10	X	
Off-site Soil Area 186	OFS-186-1	OFS-186-1-A	0.8	1		6-May-10	X	
Off-site Soil Area 186	OFS-186-1	OFS-986-1	0	0.2	DUP	6-May-10	X	
Off-site Soil Area 186	OFS-186-2	OFS-186-2	0	0.2		6-May-10	X	
Off-site Soil Area 186	OFS-186-3	OFS-186-3	0	0.2		6-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 186	OFS-186-4	OFS-186-4	0	0.2		6-May-10	X	
Off-site Soil Area 186	OFS-186-5	OFS-186-5	0	0.2		6-May-10	X	
Off-site Soil Area 186	OFS-186-6	OFS-186-6	0	0.2		6-May-10	X	
Off-site Soil Area 186	OFS-186-7	OFS-186-7	0	0.2		6-May-10	X	
Off-site Soil Area 186	OFS-186-8	OFS-186-8	0	0.2		6-May-10	X	
Off-site Soil Area 186	OFS-186-9	OFS-186-9	0	0.2		6-May-10	X	
Off-site Soil Area 187	OFS-187-1	OFS-187-1	0	0.2		7-May-10	X	
Off-site Soil Area 187	OFS-187-1	OFS-187-1-A	0.8	1		7-May-10	X	
Off-site Soil Area 187	OFS-187-1	OFS-987-1	0	0.2	DUP	7-May-10	X	
Off-site Soil Area 187	OFS-187-2	OFS-187-2	0	0.2		7-May-10	X	
Off-site Soil Area 187	OFS-187-3	OFS-187-3	0	0.2		7-May-10	X	
Off-site Soil Area 187	OFS-187-4	OFS-187-4	0	0.2		7-May-10	X	
Off-site Soil Area 187	OFS-187-5	OFS-187-5	0	0.2		7-May-10	X	
Off-site Soil Area 187	OFS-187-6	OFS-187-6	0	0.2		7-May-10	X	
Off-site Soil Area 187	OFS-187-7	OFS-187-7	0	0.2		7-May-10	X	
Off-site Soil Area 187	OFS-187-8	OFS-187-8	0	0.2		7-May-10	X	
Off-site Soil Area 187	OFS-187-9	OFS-187-9	0	0.2		7-May-10	X	
Off-site Soil Area 188	OFS-188-1	OFS-188-1	0	0.2		6-May-10	X	
Off-site Soil Area 188	OFS-188-1	OFS-188-1-A	0.8	1		6-May-10	X	
Off-site Soil Area 188	OFS-188-1	OFS-988-1	0	0.2	DUP	6-May-10	X	
Off-site Soil Area 188	OFS-188-2	OFS-188-2	0	0.2		6-May-10	X	
Off-site Soil Area 188	OFS-188-3	OFS-188-3	0	0.2		6-May-10	X	
Off-site Soil Area 188	OFS-188-4	OFS-188-4	0	0.2		6-May-10	X	
Off-site Soil Area 188	OFS-188-5	OFS-188-5	0	0.2		6-May-10	X	
Off-site Soil Area 188	OFS-188-6	OFS-188-6	0	0.2		6-May-10	X	
Off-site Soil Area 188	OFS-188-7	OFS-188-7	0	0.2		6-May-10	X	
Off-site Soil Area 188	OFS-188-8	OFS-188-8	0	0.2		6-May-10	X	
Off-site Soil Area 188	OFS-188-9	OFS-188-9	0	0.2		6-May-10	X	
Off-site Soil Area 189	OFS-189-1	OFS-189-1	0	0.2		6-May-10	X	
Off-site Soil Area 189	OFS-189-1	OFS-189-1-A	0.8	1		6-May-10	X	
Off-site Soil Area 189	OFS-189-1	OFS-989-1	0	0.2	DUP	6-May-10	X	
Off-site Soil Area 189	OFS-189-2	OFS-189-2	0	0.2		6-May-10	X	
Off-site Soil Area 189	OFS-189-3	OFS-189-3	0	0.2		6-May-10	X	
Off-site Soil Area 189	OFS-189-4	OFS-189-4	0	0.2		6-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 189	OFS-189-5	OFS-189-5	0	0.2		6-May-10	X	
Off-site Soil Area 189	OFS-189-6	OFS-189-6	0	0.2		6-May-10	X	
Off-site Soil Area 189	OFS-189-7	OFS-189-7	0	0.2		6-May-10	X	
Off-site Soil Area 189	OFS-189-8	OFS-189-8	0	0.2		6-May-10	X	
Off-site Soil Area 189	OFS-189-9	OFS-189-9	0	0.2		6-May-10	X	
Off-site Soil Area 190	OFS-190-1	OFS-190-1	0	0.2		7-May-10	X	
Off-site Soil Area 190	OFS-190-1	OFS-190-1-A	0.8	1		7-May-10	X	
Off-site Soil Area 190	OFS-190-1	OFS-990-1	0	0.2	DUP	7-May-10	X	
Off-site Soil Area 190	OFS-190-2	OFS-190-2	0	0.2		7-May-10	X	
Off-site Soil Area 190	OFS-190-3	OFS-190-3	0	0.2		7-May-10	X	
Off-site Soil Area 190	OFS-190-4	OFS-190-4	0	0.2		7-May-10	X	
Off-site Soil Area 190	OFS-190-5	OFS-190-5	0	0.2		7-May-10	X	
Off-site Soil Area 190	OFS-190-6	OFS-190-6	0	0.2		7-May-10	X	
Off-site Soil Area 190	OFS-190-7	OFS-190-7	0	0.2		7-May-10	X	
Off-site Soil Area 190	OFS-190-8	OFS-190-8	0	0.2		7-May-10	X	
Off-site Soil Area 190	OFS-190-9	OFS-190-9	0	0.2		7-May-10	X	
Off-site Soil Area 191	OFS-191-1	OFS-191-1	0	0.2		7-May-10	X	
Off-site Soil Area 191	OFS-191-1	OFS-191-1-A	0.8	1		7-May-10	X	
Off-site Soil Area 191	OFS-191-1	OFS-991-1	0	0.2	DUP	7-May-10	X	
Off-site Soil Area 191	OFS-191-2	OFS-191-2	0	0.2		7-May-10	X	
Off-site Soil Area 191	OFS-191-3	OFS-191-3	0	0.2		7-May-10	X	
Off-site Soil Area 191	OFS-191-4	OFS-191-4	0	0.2		7-May-10	X	
Off-site Soil Area 191	OFS-191-5	OFS-191-5	0	0.2		7-May-10	X	
Off-site Soil Area 191	OFS-191-6	OFS-191-6	0	0.2		7-May-10	X	
Off-site Soil Area 191	OFS-191-7	OFS-191-7	0	0.2		7-May-10	X	
Off-site Soil Area 191	OFS-191-8	OFS-191-8	0	0.2		7-May-10	X	
Off-site Soil Area 191	OFS-191-9	OFS-191-9	0	0.2		7-May-10	X	
Off-site Soil Area 192	OFS-192-1	OFS-192-1	0	0.2		7-May-10	X	
Off-site Soil Area 192	OFS-192-1	OFS-192-1-A	0.8	1		7-May-10	X	
Off-site Soil Area 192	OFS-192-1	OFS-992-1	0	0.2	DUP	7-May-10	X	
Off-site Soil Area 192	OFS-192-2	OFS-192-2	0	0.2		7-May-10	X	
Off-site Soil Area 192	OFS-192-3	OFS-192-3	0	0.2		7-May-10	X	
Off-site Soil Area 192	OFS-192-4	OFS-192-4	0	0.2		7-May-10	X	
Off-site Soil Area 192	OFS-192-5	OFS-192-5	0	0.2		7-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 192	OFS-192-6	OFS-192-6	0	0.2		7-May-10	X	
Off-site Soil Area 192	OFS-192-7	OFS-192-7	0	0.2		7-May-10	X	
Off-site Soil Area 192	OFS-192-8	OFS-192-8	0	0.2		7-May-10	X	
Off-site Soil Area 192	OFS-192-9	OFS-192-9	0	0.2		7-May-10	X	
Off-site Soil Area 193	OFS-193-1	OFS-193-1	0	0.2		7-May-10	X	
Off-site Soil Area 193	OFS-193-1	OFS-193-1-A	0.8	1		7-May-10	X	
Off-site Soil Area 193	OFS-193-1	OFS-993-1	0	0.2	DUP	7-May-10	X	
Off-site Soil Area 193	OFS-193-2	OFS-193-2	0	0.2		7-May-10	X	
Off-site Soil Area 193	OFS-193-3	OFS-193-3	0	0.2		7-May-10	X	
Off-site Soil Area 193	OFS-193-4	OFS-193-4	0	0.2		7-May-10	X	
Off-site Soil Area 193	OFS-193-5	OFS-193-5	0	0.2		7-May-10	X	
Off-site Soil Area 193	OFS-193-6	OFS-193-6	0	0.2		7-May-10	X	
Off-site Soil Area 193	OFS-193-7	OFS-193-7	0	0.2		7-May-10	X	
Off-site Soil Area 193	OFS-193-8	OFS-193-8	0	0.2		7-May-10	X	
Off-site Soil Area 193	OFS-193-9	OFS-193-9	0	0.2		7-May-10	X	
Off-site Soil Area 194	OFS-194-1	OFS-194-1	0	0.2		7-May-10	X	
Off-site Soil Area 194	OFS-194-1	OFS-194-1-A	0.8	1		7-May-10	X	
Off-site Soil Area 194	OFS-194-1	OFS-994-1	0	0.2	DUP	7-May-10	X	
Off-site Soil Area 194	OFS-194-2	OFS-194-2	0	0.2		7-May-10	X	
Off-site Soil Area 194	OFS-194-3	OFS-194-3	0	0.2		7-May-10	X	
Off-site Soil Area 194	OFS-194-4	OFS-194-4	0	0.2		7-May-10	X	
Off-site Soil Area 194	OFS-194-5	OFS-194-5	0	0.2		7-May-10	X	
Off-site Soil Area 194	OFS-194-6	OFS-194-6	0	0.2		7-May-10	X	
Off-site Soil Area 194	OFS-194-7	OFS-194-7	0	0.2		7-May-10	X	
Off-site Soil Area 194	OFS-194-8	OFS-194-8	0	0.2		7-May-10	X	
Off-site Soil Area 194	OFS-194-9	OFS-194-9	0	0.2		7-May-10	X	
Off-site Soil Area 195	OFS-195-1	OFS-195-1	0	0.2		7-May-10	X	
Off-site Soil Area 195	OFS-195-1	OFS-195-1-A	0.8	1		7-May-10	X	
Off-site Soil Area 195	OFS-195-1	OFS-995-1	0	0.2	DUP	7-May-10	X	
Off-site Soil Area 195	OFS-195-2	OFS-195-2	0	0.2		7-May-10	X	
Off-site Soil Area 195	OFS-195-3	OFS-195-3	0	0.2		7-May-10	X	
Off-site Soil Area 195	OFS-195-4	OFS-195-4	0	0.2		7-May-10	X	
Off-site Soil Area 195	OFS-195-5	OFS-195-5	0	0.2		7-May-10	X	
Off-site Soil Area 195	OFS-195-6	OFS-195-6	0	0.2		7-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 195	OFS-195-7	OFS-195-7	0	0.2		7-May-10	X	
Off-site Soil Area 195	OFS-195-8	OFS-195-8	0	0.2		7-May-10	X	
Off-site Soil Area 195	OFS-195-9	OFS-195-9	0	0.2		7-May-10	X	
Off-site Soil Area 196	OFS-196-1	OFS-196-1	0	0.2		7-May-10	X	
Off-site Soil Area 196	OFS-196-1	OFS-196-1-A	0.8	1		7-May-10	X	
Off-site Soil Area 196	OFS-196-1	OFS-996-1	0	0.2	DUP	7-May-10	X	
Off-site Soil Area 196	OFS-196-2	OFS-196-2	0	0.2		7-May-10	X	
Off-site Soil Area 196	OFS-196-3	OFS-196-3	0	0.2		7-May-10	X	
Off-site Soil Area 196	OFS-196-4	OFS-196-4	0	0.2		7-May-10	X	
Off-site Soil Area 196	OFS-196-5	OFS-196-5	0	0.2		7-May-10	X	
Off-site Soil Area 196	OFS-196-6	OFS-196-6	0	0.2		7-May-10	X	
Off-site Soil Area 196	OFS-196-7	OFS-196-7	0	0.2		7-May-10	X	
Off-site Soil Area 196	OFS-196-8	OFS-196-8	0	0.2		7-May-10	X	
Off-site Soil Area 196	OFS-196-9	OFS-196-9	0	0.2		7-May-10	X	
Off-site Soil Area 197	OFS-197-1	OFS-197-1	0	0.2		7-May-10	X	
Off-site Soil Area 197	OFS-197-1	OFS-197-1-A	0.8	1		7-May-10	X	
Off-site Soil Area 197	OFS-197-1	OFS-997-1	0	0.2	DUP	7-May-10	X	
Off-site Soil Area 197	OFS-197-2	OFS-197-2	0	0.2		7-May-10	X	
Off-site Soil Area 197	OFS-197-3	OFS-197-3	0	0.2		7-May-10	X	
Off-site Soil Area 197	OFS-197-4	OFS-197-4	0	0.2		7-May-10	X	
Off-site Soil Area 197	OFS-197-5	OFS-197-5	0	0.2		7-May-10	X	
Off-site Soil Area 197	OFS-197-6	OFS-197-6	0	0.2		7-May-10	X	
Off-site Soil Area 197	OFS-197-7	OFS-197-7	0	0.2		7-May-10	X	
Off-site Soil Area 197	OFS-197-8	OFS-197-8	0	0.2		7-May-10	X	
Off-site Soil Area 197	OFS-197-9	OFS-197-9	0	0.2		7-May-10	X	
Off-site Soil Area 198	OFS-198-1	OFS-198-1	0	0.2		7-May-10	X	
Off-site Soil Area 198	OFS-198-1	OFS-198-1-A	0.8	1		7-May-10	X	
Off-site Soil Area 198	OFS-198-1	OFS-998-1	0	0.2	DUP	7-May-10	X	
Off-site Soil Area 198	OFS-198-2	OFS-198-2	0	0.2		7-May-10	X	
Off-site Soil Area 198	OFS-198-3	OFS-198-3	0	0.2		7-May-10	X	
Off-site Soil Area 198	OFS-198-4	OFS-198-4	0	0.2		7-May-10	X	
Off-site Soil Area 198	OFS-198-5	OFS-198-5	0	0.2		7-May-10	X	
Off-site Soil Area 198	OFS-198-6	OFS-198-6	0	0.2		7-May-10	X	
Off-site Soil Area 198	OFS-198-7	OFS-198-7	0	0.2		7-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 198	OFS-198-8	OFS-198-8	0	0.2		7-May-10	X	
Off-site Soil Area 198	OFS-198-9	OFS-198-9	0	0.2		7-May-10	X	
Off-site Soil Area 199	OFS-199-1	OFS-199-1	0	0.2		8-May-10	X	
Off-site Soil Area 199	OFS-199-1	OFS-199-1-A	0.8	1		8-May-10	X	
Off-site Soil Area 199	OFS-199-1	OFS-999-1	0	0.2	DUP	8-May-10	X	
Off-site Soil Area 199	OFS-199-2	OFS-199-2	0	0.2		8-May-10	X	
Off-site Soil Area 199	OFS-199-3	OFS-199-3	0	0.2		8-May-10	X	
Off-site Soil Area 199	OFS-199-4	OFS-199-4	0	0.2		8-May-10	X	
Off-site Soil Area 199	OFS-199-5	OFS-199-5	0	0.2		8-May-10	X	
Off-site Soil Area 199	OFS-199-6	OFS-199-6	0	0.2		8-May-10	X	
Off-site Soil Area 199	OFS-199-7	OFS-199-7	0	0.2		8-May-10	X	
Off-site Soil Area 199	OFS-199-8	OFS-199-8	0	0.2		8-May-10	X	
Off-site Soil Area 199	OFS-199-9	OFS-199-9	0	0.2		8-May-10	X	
Off-site Soil Area 200	OFS-200-1	OFS-800-1	0	0.2	DUP	7-May-10	X	
Off-site Soil Area 200	OFS-200-2	OFS-200-2	0	0.2		7-May-10	X	
Off-site Soil Area 200	OFS-200-3	OFS-200-3	0	0.2		7-May-10	X	
Off-site Soil Area 200	OFS-200-4	OFS-200-4	0	0.2		7-May-10	X	
Off-site Soil Area 200	OFS-200-5	OFS-200-5	0	0.2		7-May-10	X	
Off-site Soil Area 200	OFS-200-6	OFS-200-6	0	0.2		7-May-10	X	
Off-site Soil Area 200	OFS-200-7	OFS-200-7	0	0.2		7-May-10	X	
Off-site Soil Area 200	OFS-200-8	OFS-200-8	0	0.2		7-May-10	X	
Off-site Soil Area 200	OFS-200-9	OFS-200-9	0	0.2		7-May-10	X	
Off-site Soil Area 201	OFS-201-1	OFS-201-1	0	0.2		7-May-10	X	
Off-site Soil Area 201	OFS-201-1	OFS-201-1-A	0.8	1		7-May-10	X	
Off-site Soil Area 201	OFS-201-1	OFS-801-1	0	0.2	DUP	7-May-10	X	
Off-site Soil Area 201	OFS-201-2	OFS-201-2	0	0.2		7-May-10	X	
Off-site Soil Area 201	OFS-201-3	OFS-201-3	0	0.2		7-May-10	X	
Off-site Soil Area 201	OFS-201-4	OFS-201-4	0	0.2		7-May-10	X	
Off-site Soil Area 201	OFS-201-5	OFS-201-5	0	0.2		7-May-10	X	
Off-site Soil Area 201	OFS-201-6	OFS-201-6	0	0.2		7-May-10	X	
Off-site Soil Area 201	OFS-201-7	OFS-201-7	0	0.2		7-May-10	X	
Off-site Soil Area 201	OFS-201-8	OFS-201-8	0	0.2		7-May-10	X	
Off-site Soil Area 201	OFS-201-9	OFS-201-9	0	0.2		7-May-10	X	
Off-site Soil Area 202	OFS-202-1	OFS-202-1	0	0.2		11-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 202	OFS-202-1	OFS-202-1-A	0.8	1		11-May-10	X	
Off-site Soil Area 202	OFS-202-1	OFS-802-1	0	0.2	DUP	11-May-10	X	
Off-site Soil Area 202	OFS-202-2	OFS-202-2	0	0.2		11-May-10	X	
Off-site Soil Area 202	OFS-202-3	OFS-202-3	0	0.2		11-May-10	X	
Off-site Soil Area 202	OFS-202-4	OFS-202-4	0	0.2		11-May-10	X	
Off-site Soil Area 202	OFS-202-5	OFS-202-5	0	0.2		11-May-10	X	
Off-site Soil Area 202	OFS-202-6	OFS-202-6	0	0.2		11-May-10	X	
Off-site Soil Area 202	OFS-202-7	OFS-202-7	0	0.2		11-May-10	X	
Off-site Soil Area 202	OFS-202-8	OFS-202-8	0	0.2		11-May-10	X	
Off-site Soil Area 202	OFS-202-9	OFS-202-9	0	0.2		11-May-10	X	
Off-site Soil Area 203	OFS-203-1	OFS-203-1	0	0.2		7-May-10	X	
Off-site Soil Area 203	OFS-203-1	OFS-203-1-A	0.8	1		7-May-10	X	
Off-site Soil Area 203	OFS-203-1	OFS-803-1	0	0.2	DUP	7-May-10	X	
Off-site Soil Area 203	OFS-203-2	OFS-203-2	0	0.2		7-May-10	X	
Off-site Soil Area 203	OFS-203-3	OFS-203-3	0	0.2		7-May-10	X	
Off-site Soil Area 203	OFS-203-4	OFS-203-4	0	0.2		7-May-10	X	
Off-site Soil Area 203	OFS-203-5	OFS-203-5	0	0.2		7-May-10	X	
Off-site Soil Area 203	OFS-203-6	OFS-203-6	0	0.2		7-May-10	X	
Off-site Soil Area 203	OFS-203-7	OFS-203-7	0	0.2		7-May-10	X	
Off-site Soil Area 203	OFS-203-8	OFS-203-8	0	0.2		7-May-10	X	
Off-site Soil Area 203	OFS-203-9	OFS-203-9	0	0.2		7-May-10	X	
Off-site Soil Area 204	OFS-204-1	OFS-204-1	0	0.2		8-May-10	X	
Off-site Soil Area 204	OFS-204-1	OFS-204-1-A	0.8	1		8-May-10	X	
Off-site Soil Area 204	OFS-204-1	OFS-804-1	0	0.2	DUP	8-May-10	X	
Off-site Soil Area 204	OFS-204-2	OFS-204-2	0	0.2		8-May-10	X	
Off-site Soil Area 204	OFS-204-3	OFS-204-3	0	0.2		8-May-10	X	
Off-site Soil Area 204	OFS-204-4	OFS-204-4	0	0.2		8-May-10	X	
Off-site Soil Area 204	OFS-204-5	OFS-204-5	0	0.2		8-May-10	X	
Off-site Soil Area 204	OFS-204-6	OFS-204-6	0	0.2		8-May-10	X	
Off-site Soil Area 204	OFS-204-7	OFS-204-7	0	0.2		8-May-10	X	
Off-site Soil Area 204	OFS-204-8	OFS-204-8	0	0.2		8-May-10	X	
Off-site Soil Area 204	OFS-204-9	OFS-204-9	0	0.2		8-May-10	X	
Off-site Soil Area 205	OFS-205-1	OFS-205-1	0	0.2		8-May-10	X	
Off-site Soil Area 205	OFS-205-1	OFS-205-1-A	0.8	1		8-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 205	OFS-205-1	OFS-805-1	0	0.2	DUP	8-May-10	X	
Off-site Soil Area 205	OFS-205-2	OFS-205-2	0	0.2		8-May-10	X	
Off-site Soil Area 205	OFS-205-3	OFS-205-3	0	0.2		8-May-10	X	
Off-site Soil Area 205	OFS-205-4	OFS-205-4	0	0.2		8-May-10	X	
Off-site Soil Area 205	OFS-205-5	OFS-205-5	0	0.2		8-May-10	X	
Off-site Soil Area 205	OFS-205-6	OFS-205-6	0	0.2		8-May-10	X	
Off-site Soil Area 205	OFS-205-7	OFS-205-7	0	0.2		8-May-10	X	
Off-site Soil Area 205	OFS-205-8	OFS-205-8	0	0.2		8-May-10	X	
Off-site Soil Area 205	OFS-205-9	OFS-205-9	0	0.2		8-May-10	X	
Off-site Soil Area 206	OFS-206-1	OFS-206-1	0	0.2		8-May-10	X	
Off-site Soil Area 206	OFS-206-1	OFS-206-1-A	0.8	1		8-May-10	X	
Off-site Soil Area 206	OFS-206-1	OFS-806-1	0	0.2	DUP	8-May-10	X	
Off-site Soil Area 206	OFS-206-2	OFS-206-2	0	0.2		8-May-10	X	
Off-site Soil Area 206	OFS-206-3	OFS-206-3	0	0.2		8-May-10	X	
Off-site Soil Area 206	OFS-206-4	OFS-206-4	0	0.2		8-May-10	X	
Off-site Soil Area 206	OFS-206-5	OFS-206-5	0	0.2		8-May-10	X	
Off-site Soil Area 206	OFS-206-6	OFS-206-6	0	0.2		8-May-10	X	
Off-site Soil Area 206	OFS-206-7	OFS-206-7	0	0.2		8-May-10	X	
Off-site Soil Area 206	OFS-206-8	OFS-206-8	0	0.2		8-May-10	X	
Off-site Soil Area 206	OFS-206-9	OFS-206-9	0	0.2		8-May-10	X	
Off-site Soil Area 207	OFS-207-1	OFS-207-1	0	0.2		8-May-10	X	
Off-site Soil Area 207	OFS-207-1	OFS-207-1-A	0.8	1		8-May-10	X	
Off-site Soil Area 207	OFS-207-1	OFS-807-1	0	0.2	DUP	8-May-10	X	
Off-site Soil Area 207	OFS-207-2	OFS-207-2	0	0.2		8-May-10	X	
Off-site Soil Area 207	OFS-207-3	OFS-207-3	0	0.2		8-May-10	X	
Off-site Soil Area 207	OFS-207-4	OFS-207-4	0	0.2		8-May-10	X	
Off-site Soil Area 207	OFS-207-5	OFS-207-5	0	0.2		8-May-10	X	
Off-site Soil Area 207	OFS-207-6	OFS-207-6	0	0.2		8-May-10	X	
Off-site Soil Area 207	OFS-207-7	OFS-207-7	0	0.2		8-May-10	X	
Off-site Soil Area 207	OFS-207-8	OFS-207-8	0	0.2		8-May-10	X	
Off-site Soil Area 207	OFS-207-9	OFS-207-9	0	0.2		8-May-10	X	
Off-site Soil Area 208	OFS-208-1	OFS-208-1	0	0.2		8-May-10	X	
Off-site Soil Area 208	OFS-208-1	OFS-208-1-A	0.8	1		8-May-10	X	
Off-site Soil Area 208	OFS-208-1	OFS-808-1	0	0.2	DUP	8-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 208	OFS-208-2	OFS-208-2	0	0.2		8-May-10	X	
Off-site Soil Area 208	OFS-208-3	OFS-208-3	0	0.2		8-May-10	X	
Off-site Soil Area 208	OFS-208-4	OFS-208-4	0	0.2		8-May-10	X	
Off-site Soil Area 208	OFS-208-5	OFS-208-5	0	0.2		8-May-10	X	
Off-site Soil Area 208	OFS-208-6	OFS-208-6	0	0.2		8-May-10	X	
Off-site Soil Area 208	OFS-208-7	OFS-208-7	0	0.2		8-May-10	X	
Off-site Soil Area 208	OFS-208-8	OFS-208-8	0	0.2		8-May-10	X	
Off-site Soil Area 208	OFS-208-9	OFS-208-9	0	0.2		8-May-10	X	
Off-site Soil Area 209	OFS-209-1	OFS-209-1	0	0.2		8-May-10	X	
Off-site Soil Area 209	OFS-209-1	OFS-209-1-A	0.8	1		8-May-10	X	
Off-site Soil Area 209	OFS-209-1	OFS-809-1	0	0.2	DUP	8-May-10	X	
Off-site Soil Area 209	OFS-209-2	OFS-209-2	0	0.2		8-May-10	X	
Off-site Soil Area 209	OFS-209-3	OFS-209-3	0	0.2		8-May-10	X	
Off-site Soil Area 209	OFS-209-4	OFS-209-4	0	0.2		8-May-10	X	
Off-site Soil Area 209	OFS-209-5	OFS-209-5	0	0.2		8-May-10	X	
Off-site Soil Area 209	OFS-209-6	OFS-209-6	0	0.2		8-May-10	X	
Off-site Soil Area 209	OFS-209-7	OFS-209-7	0	0.2		8-May-10	X	
Off-site Soil Area 209	OFS-209-8	OFS-209-8	0	0.2		8-May-10	X	
Off-site Soil Area 209	OFS-209-9	OFS-209-9	0	0.2		8-May-10	X	
Off-site Soil Area 210	OFS-210-1	OFS-210-1	0	0.2		8-May-10	X	
Off-site Soil Area 210	OFS-210-1	OFS-210-1-A	0.8	1		8-May-10	X	
Off-site Soil Area 210	OFS-210-1	OFS-810-1	0	0.2	DUP	8-May-10	X	
Off-site Soil Area 210	OFS-210-2	OFS-210-2	0	0.2		8-May-10	X	
Off-site Soil Area 210	OFS-210-3	OFS-210-3	0	0.2		8-May-10	X	
Off-site Soil Area 210	OFS-210-4	OFS-210-4	0	0.2		8-May-10	X	
Off-site Soil Area 210	OFS-210-5	OFS-210-5	0	0.2		8-May-10	X	
Off-site Soil Area 210	OFS-210-6	OFS-210-6	0	0.2		8-May-10	X	
Off-site Soil Area 210	OFS-210-7	OFS-210-7	0	0.2		8-May-10	X	
Off-site Soil Area 210	OFS-210-8	OFS-210-8	0	0.2		8-May-10	X	
Off-site Soil Area 210	OFS-210-9	OFS-210-9	0	0.2		8-May-10	X	
Off-site Soil Area 211	OFS-211-1	OFS-211-1	0	0.2		8-May-10	X	
Off-site Soil Area 211	OFS-211-1	OFS-211-1-A	0.8	1		8-May-10	X	
Off-site Soil Area 211	OFS-211-1	OFS-811-1	0	0.2	DUP	8-May-10	X	
Off-site Soil Area 211	OFS-211-2	OFS-211-2	0	0.2		8-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 211	OFS-211-3	OFS-211-3	0	0.2		8-May-10	X	
Off-site Soil Area 211	OFS-211-4	OFS-211-4	0	0.2		8-May-10	X	
Off-site Soil Area 211	OFS-211-5	OFS-211-5	0	0.2		8-May-10	X	
Off-site Soil Area 211	OFS-211-6	OFS-211-6	0	0.2		8-May-10	X	
Off-site Soil Area 211	OFS-211-7	OFS-211-7	0	0.2		8-May-10	X	
Off-site Soil Area 211	OFS-211-8	OFS-211-8	0	0.2		8-May-10	X	
Off-site Soil Area 211	OFS-211-9	OFS-211-9	0	0.2		8-May-10	X	
Off-site Soil Area 212	OFS-212-1	OFS-212-1	0	0.2		8-May-10	X	
Off-site Soil Area 212	OFS-212-1	OFS-212-1-A	0.8	1		8-May-10	X	
Off-site Soil Area 212	OFS-212-1	OFS-812-1	0	0.2	DUP	8-May-10	X	
Off-site Soil Area 212	OFS-212-2	OFS-212-2	0	0.2		8-May-10	X	
Off-site Soil Area 212	OFS-212-3	OFS-212-3	0	0.2		8-May-10	X	
Off-site Soil Area 212	OFS-212-4	OFS-212-4	0	0.2		8-May-10	X	
Off-site Soil Area 212	OFS-212-5	OFS-212-5	0	0.2		8-May-10	X	
Off-site Soil Area 212	OFS-212-6	OFS-212-6	0	0.2		8-May-10	X	
Off-site Soil Area 212	OFS-212-7	OFS-212-7	0	0.2		8-May-10	X	
Off-site Soil Area 212	OFS-212-8	OFS-212-8	0	0.2		8-May-10	X	
Off-site Soil Area 212	OFS-212-9	OFS-212-9	0	0.2		8-May-10	X	
Off-site Soil Area 213	OFS-213-1	OFS-213-1	0	0.2		8-May-10	X	
Off-site Soil Area 213	OFS-213-1	OFS-213-1-A	0.8	1		8-May-10	X	
Off-site Soil Area 213	OFS-213-1	OFS-813-1	0	0.2	DUP	8-May-10	X	
Off-site Soil Area 213	OFS-213-2	OFS-213-2	0	0.2		8-May-10	X	
Off-site Soil Area 213	OFS-213-3	OFS-213-3	0	0.2		8-May-10	X	
Off-site Soil Area 213	OFS-213-4	OFS-213-4	0	0.2		8-May-10	X	
Off-site Soil Area 213	OFS-213-5	OFS-213-5	0	0.2		8-May-10	X	
Off-site Soil Area 213	OFS-213-6	OFS-213-6	0	0.2		8-May-10	X	
Off-site Soil Area 213	OFS-213-7	OFS-213-7	0	0.2		8-May-10	X	
Off-site Soil Area 213	OFS-213-8	OFS-213-8	0	0.2		8-May-10	X	
Off-site Soil Area 213	OFS-213-9	OFS-213-9	0	0.2		8-May-10	X	
Off-site Soil Area 214	OFS-214-1	OFS-214-1	0	0.2		10-May-10	X	
Off-site Soil Area 214	OFS-214-1	OFS-214-1-A	0.8	1		10-May-10	X	
Off-site Soil Area 214	OFS-214-1	OFS-814-1	0	0.2	DUP	10-May-10	X	
Off-site Soil Area 214	OFS-214-2	OFS-214-2	0	0.2		10-May-10	X	
Off-site Soil Area 214	OFS-214-3	OFS-214-3	0	0.2		10-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 214	OFS-214-4	OFS-214-4	0	0.2		10-May-10	X	
Off-site Soil Area 214	OFS-214-5	OFS-214-5	0	0.2		10-May-10	X	
Off-site Soil Area 214	OFS-214-6	OFS-214-6	0	0.2		10-May-10	X	
Off-site Soil Area 214	OFS-214-7	OFS-214-7	0	0.2		10-May-10	X	
Off-site Soil Area 214	OFS-214-8	OFS-214-8	0	0.2		10-May-10	X	
Off-site Soil Area 214	OFS-214-9	OFS-214-9	0	0.2		10-May-10	X	
Off-site Soil Area 215	OFS-215-1	OFS-215-1	0	0.2		10-May-10	X	
Off-site Soil Area 215	OFS-215-1	OFS-215-1-A	0.8	1		10-May-10	X	
Off-site Soil Area 215	OFS-215-1	OFS-815-1	0	0.2	DUP	10-May-10	X	
Off-site Soil Area 215	OFS-215-2	OFS-215-2	0	0.2		10-May-10	X	
Off-site Soil Area 215	OFS-215-3	OFS-215-3	0	0.2		10-May-10	X	
Off-site Soil Area 215	OFS-215-4	OFS-215-4	0	0.2		10-May-10	X	
Off-site Soil Area 215	OFS-215-5	OFS-215-5	0	0.2		10-May-10	X	
Off-site Soil Area 215	OFS-215-6	OFS-215-6	0	0.2		10-May-10	X	
Off-site Soil Area 215	OFS-215-7	OFS-215-7	0	0.2		10-May-10	X	
Off-site Soil Area 215	OFS-215-8	OFS-215-8	0	0.2		10-May-10	X	
Off-site Soil Area 215	OFS-215-9	OFS-215-9	0	0.2		10-May-10	X	
Off-site Soil Area 216	OFS-216-1	OFS-216-1	0	0.2		11-May-10	X	
Off-site Soil Area 216	OFS-216-1	OFS-216-1-A	0.8	1		11-May-10	X	
Off-site Soil Area 216	OFS-216-1	OFS-816-1	0	0.2	DUP	11-May-10	X	
Off-site Soil Area 216	OFS-216-2	OFS-216-2	0	0.2		11-May-10	X	
Off-site Soil Area 216	OFS-216-3	OFS-216-3	0	0.2		11-May-10	X	
Off-site Soil Area 216	OFS-216-4	OFS-216-4	0	0.2		11-May-10	X	
Off-site Soil Area 216	OFS-216-5	OFS-216-5	0	0.2		11-May-10	X	
Off-site Soil Area 216	OFS-216-6	OFS-216-6	0	0.2		11-May-10	X	
Off-site Soil Area 216	OFS-216-7	OFS-216-7	0	0.2		11-May-10	X	
Off-site Soil Area 216	OFS-216-8	OFS-216-8	0	0.2		11-May-10	X	
Off-site Soil Area 216	OFS-216-9	OFS-216-9	0	0.2		11-May-10	X	
Off-site Soil Area 217	OFS-217-1	OFS-217-1	0	0.2		11-May-10	X	
Off-site Soil Area 217	OFS-217-1	OFS-217-1-A	0.8	1		11-May-10	X	
Off-site Soil Area 217	OFS-217-1	OFS-817-1	0	0.2	DUP	11-May-10	X	
Off-site Soil Area 217	OFS-217-2	OFS-217-2	0	0.2		11-May-10	X	
Off-site Soil Area 217	OFS-217-3	OFS-217-3	0	0.2		11-May-10	X	
Off-site Soil Area 217	OFS-217-4	OFS-217-4	0	0.2		11-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 217	OFS-217-5	OFS-217-5	0	0.2		11-May-10	X	
Off-site Soil Area 217	OFS-217-6	OFS-217-6	0	0.2		11-May-10	X	
Off-site Soil Area 217	OFS-217-7	OFS-217-7	0	0.2		11-May-10	X	
Off-site Soil Area 217	OFS-217-8	OFS-217-8	0	0.2		11-May-10	X	
Off-site Soil Area 217	OFS-217-9	OFS-217-9	0	0.2		11-May-10	X	
Off-site Soil Area 218	OFS-218-1	OFS-218-1	0	0.2		10-May-10	X	
Off-site Soil Area 218	OFS-218-1	OFS-218-1-A	0.8	1		10-May-10	X	
Off-site Soil Area 218	OFS-218-1	OFS-818-1	0	0.2	DUP	10-May-10	X	
Off-site Soil Area 218	OFS-218-2	OFS-218-2	0	0.2		10-May-10	X	
Off-site Soil Area 218	OFS-218-3	OFS-218-3	0	0.2		10-May-10	X	
Off-site Soil Area 218	OFS-218-4	OFS-218-4	0	0.2		10-May-10	X	
Off-site Soil Area 218	OFS-218-5	OFS-218-5	0	0.2		10-May-10	X	
Off-site Soil Area 218	OFS-218-6	OFS-218-6	0	0.2		10-May-10	X	
Off-site Soil Area 218	OFS-218-7	OFS-218-7	0	0.2		10-May-10	X	
Off-site Soil Area 218	OFS-218-8	OFS-218-8	0	0.2		10-May-10	X	
Off-site Soil Area 218	OFS-218-9	OFS-218-9	0	0.2		10-May-10	X	
Off-site Soil Area 219	OFS-219-1	OFS-219-1	0	0.2		10-May-10	X	
Off-site Soil Area 219	OFS-219-1	OFS-219-1-A	0.8	1		10-May-10	X	
Off-site Soil Area 219	OFS-219-1	OFS-819-1	0	0.2	DUP	10-May-10	X	
Off-site Soil Area 219	OFS-219-2	OFS-219-2	0	0.2		10-May-10	X	
Off-site Soil Area 219	OFS-219-3	OFS-219-3	0	0.2		10-May-10	X	
Off-site Soil Area 219	OFS-219-4	OFS-219-4	0	0.2		10-May-10	X	
Off-site Soil Area 219	OFS-219-5	OFS-219-5	0	0.2		10-May-10	X	
Off-site Soil Area 219	OFS-219-6	OFS-219-6	0	0.2		10-May-10	X	
Off-site Soil Area 219	OFS-219-7	OFS-219-7	0	0.2		10-May-10	X	
Off-site Soil Area 219	OFS-219-8	OFS-219-8	0	0.2		10-May-10	X	
Off-site Soil Area 219	OFS-219-9	OFS-219-9	0	0.2		10-May-10	X	
Off-site Soil Area 220	OFS-200-1	OFS-200-1	0	0.2		7-May-10	X	
Off-site Soil Area 220	OFS-200-1	OFS-200-1-A	0.8	1		7-May-10	X	
Off-site Soil Area 220	OFS-220-1	OFS-220-1	0	0.2		10-May-10	X	
Off-site Soil Area 220	OFS-220-1	OFS-220-1-A	0.8	1		10-May-10	X	
Off-site Soil Area 220	OFS-220-1	OFS-820-1	0	0.2	DUP	10-May-10	X	
Off-site Soil Area 220	OFS-220-2	OFS-220-2	0	0.2		10-May-10	X	
Off-site Soil Area 220	OFS-220-3	OFS-220-3	0	0.2		10-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 220	OFS-220-4	OFS-220-4	0	0.2		10-May-10	X	
Off-site Soil Area 220	OFS-220-5	OFS-220-5	0	0.2		10-May-10	X	
Off-site Soil Area 220	OFS-220-6	OFS-220-6	0	0.2		10-May-10	X	
Off-site Soil Area 220	OFS-220-7	OFS-220-7	0	0.2		10-May-10	X	
Off-site Soil Area 220	OFS-220-8	OFS-220-8	0	0.2		10-May-10	X	
Off-site Soil Area 220	OFS-220-9	OFS-220-9	0	0.2		10-May-10	X	
Off-site Soil Area 221	OFS-221-1	OFS-221-1	0	0.2		11-May-10	X	
Off-site Soil Area 221	OFS-221-1	OFS-221-1-A	0.8	1		11-May-10	X	
Off-site Soil Area 221	OFS-221-1	OFS-821-1	0	0.2	DUP	11-May-10	X	
Off-site Soil Area 221	OFS-221-2	OFS-221-2	0	0.2		11-May-10	X	
Off-site Soil Area 221	OFS-221-3	OFS-221-3	0	0.2		11-May-10	X	
Off-site Soil Area 221	OFS-221-4	OFS-221-4	0	0.2		11-May-10	X	
Off-site Soil Area 221	OFS-221-5	OFS-221-5	0	0.2		11-May-10	X	
Off-site Soil Area 221	OFS-221-6	OFS-221-6	0	0.2		11-May-10	X	
Off-site Soil Area 221	OFS-221-7	OFS-221-7	0	0.2		11-May-10	X	
Off-site Soil Area 221	OFS-221-8	OFS-221-8	0	0.2		11-May-10	X	
Off-site Soil Area 221	OFS-221-9	OFS-221-9	0	0.2		11-May-10	X	
Off-site Soil Area 222	OFS-222-1	OFS-222-1	0	0.2		12-May-10	X	
Off-site Soil Area 222	OFS-222-1	OFS-222-1-A	0.8	1		12-May-10	X	
Off-site Soil Area 222	OFS-222-1	OFS-822-1	0	0.2	DUP	12-May-10	X	
Off-site Soil Area 222	OFS-222-2	OFS-222-2	0	0.2		12-May-10	X	
Off-site Soil Area 222	OFS-222-3	OFS-222-3	0	0.2		12-May-10	X	
Off-site Soil Area 222	OFS-222-4	OFS-222-4	0	0.2		12-May-10	X	
Off-site Soil Area 222	OFS-222-5	OFS-222-5	0	0.2		12-May-10	X	
Off-site Soil Area 222	OFS-222-6	OFS-222-6	0	0.2		12-May-10	X	
Off-site Soil Area 222	OFS-222-7	OFS-222-7	0	0.2		12-May-10	X	
Off-site Soil Area 222	OFS-222-8	OFS-222-8	0	0.2		12-May-10	X	
Off-site Soil Area 222	OFS-222-9	OFS-222-9	0	0.2		12-May-10	X	
Off-site Soil Area 223	OFS-223-1	OFS-223-1	0	0.2		10-May-10	X	
Off-site Soil Area 223	OFS-223-1	OFS-223-1-A	0.8	1		10-May-10	X	
Off-site Soil Area 223	OFS-223-1	OFS-823-1	0	0.2	DUP	10-May-10	X	
Off-site Soil Area 223	OFS-223-2	OFS-223-2	0	0.2		10-May-10	X	
Off-site Soil Area 223	OFS-223-3	OFS-223-3	0	0.2		10-May-10	X	
Off-site Soil Area 223	OFS-223-4	OFS-223-4	0	0.2		10-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 223	OFS-223-5	OFS-223-5	0	0.2		10-May-10	X	
Off-site Soil Area 223	OFS-223-6	OFS-223-6	0	0.2		10-May-10	X	
Off-site Soil Area 223	OFS-223-7	OFS-223-7	0	0.2		10-May-10	X	
Off-site Soil Area 223	OFS-223-8	OFS-223-8	0	0.2		10-May-10	X	
Off-site Soil Area 223	OFS-223-9	OFS-223-9	0	0.2		10-May-10	X	
Off-site Soil Area 224	OFS-224-1	OFS-224-1	0	0.2		10-May-10	X	
Off-site Soil Area 224	OFS-224-1	OFS-224-1-A	0.8	1		10-May-10	X	
Off-site Soil Area 224	OFS-224-1	OFS-824-1	0	0.2	DUP	10-May-10	X	
Off-site Soil Area 224	OFS-224-2	OFS-224-2	0	0.2		10-May-10	X	
Off-site Soil Area 224	OFS-224-3	OFS-224-3	0	0.2		10-May-10	X	
Off-site Soil Area 224	OFS-224-4	OFS-224-4	0	0.2		10-May-10	X	
Off-site Soil Area 224	OFS-224-5	OFS-224-5	0	0.2		10-May-10	X	
Off-site Soil Area 224	OFS-224-6	OFS-224-6	0	0.2		10-May-10	X	
Off-site Soil Area 224	OFS-224-7	OFS-224-7	0	0.2		10-May-10	X	
Off-site Soil Area 224	OFS-224-8	OFS-224-8	0	0.2		10-May-10	X	
Off-site Soil Area 224	OFS-224-9	OFS-224-9	0	0.2		10-May-10	X	
Off-site Soil Area 225	OFS-225-1	OFS-225-1	0	0.2		10-May-10	X	
Off-site Soil Area 225	OFS-225-1	OFS-225-1-A	0.8	1		10-May-10	X	
Off-site Soil Area 225	OFS-225-1	OFS-825-1	0	0.2	DUP	10-May-10	X	
Off-site Soil Area 225	OFS-225-2	OFS-225-2	0	0.2		10-May-10	X	
Off-site Soil Area 225	OFS-225-3	OFS-225-3	0	0.2		10-May-10	X	
Off-site Soil Area 225	OFS-225-4	OFS-225-4	0	0.2		10-May-10	X	
Off-site Soil Area 225	OFS-225-5	OFS-225-5	0	0.2		10-May-10	X	
Off-site Soil Area 225	OFS-225-6	OFS-225-6	0	0.2		10-May-10	X	
Off-site Soil Area 225	OFS-225-7	OFS-225-7	0	0.2		10-May-10	X	
Off-site Soil Area 225	OFS-225-8	OFS-225-8	0	0.2		10-May-10	X	
Off-site Soil Area 225	OFS-225-9	OFS-225-9	0	0.2		10-May-10	X	
Off-site Soil Area 226	OFS-226-1	OFS-226-1	0	0.2		10-May-10	X	
Off-site Soil Area 226	OFS-226-1	OFS-226-1-A	0.8	1		10-May-10	X	
Off-site Soil Area 226	OFS-226-1	OFS-826-1	0	0.2	DUP	10-May-10	X	
Off-site Soil Area 226	OFS-226-2	OFS-226-2	0	0.2		10-May-10	X	
Off-site Soil Area 226	OFS-226-3	OFS-226-3	0	0.2		10-May-10	X	
Off-site Soil Area 226	OFS-226-4	OFS-226-4	0	0.2		10-May-10	X	
Off-site Soil Area 226	OFS-226-5	OFS-226-5	0	0.2		10-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 226	OFS-226-6	OFS-226-6	0	0.2		10-May-10	X	
Off-site Soil Area 226	OFS-226-7	OFS-226-7	0	0.2		10-May-10	X	
Off-site Soil Area 226	OFS-226-8	OFS-226-8	0	0.2		10-May-10	X	
Off-site Soil Area 226	OFS-226-9	OFS-226-9	0	0.2		10-May-10	X	
Off-site Soil Area 227	OFS-227-1	OFS-227-1	0	0.2		10-May-10	X	
Off-site Soil Area 227	OFS-227-1	OFS-227-1-A	0.8	1		10-May-10	X	
Off-site Soil Area 227	OFS-227-1	OFS-827-1	0	0.2	DUP	10-May-10	X	
Off-site Soil Area 227	OFS-227-2	OFS-227-2	0	0.2		10-May-10	X	
Off-site Soil Area 227	OFS-227-3	OFS-227-3	0	0.2		10-May-10	X	
Off-site Soil Area 227	OFS-227-4	OFS-227-4	0	0.2		10-May-10	X	
Off-site Soil Area 227	OFS-227-5	OFS-227-5	0	0.2		10-May-10	X	
Off-site Soil Area 227	OFS-227-6	OFS-227-6	0	0.2		10-May-10	X	
Off-site Soil Area 227	OFS-227-7	OFS-227-7	0	0.2		10-May-10	X	
Off-site Soil Area 227	OFS-227-8	OFS-227-8	0	0.2		10-May-10	X	
Off-site Soil Area 227	OFS-227-9	OFS-227-9	0	0.2		10-May-10	X	
Off-site Soil Area 228	OFS-228-1	OFS-228-1	0	0.2		10-May-10	X	
Off-site Soil Area 228	OFS-228-1	OFS-228-1-A	0.8	1		10-May-10	X	
Off-site Soil Area 228	OFS-228-1	OFS-828-1	0	0.2	DUP	10-May-10	X	
Off-site Soil Area 228	OFS-228-2	OFS-228-2	0	0.2		10-May-10	X	
Off-site Soil Area 228	OFS-228-3	OFS-228-3	0	0.2		10-May-10	X	
Off-site Soil Area 228	OFS-228-4	OFS-228-4	0	0.2		10-May-10	X	
Off-site Soil Area 228	OFS-228-5	OFS-228-5	0	0.2		10-May-10	X	
Off-site Soil Area 228	OFS-228-6	OFS-228-6	0	0.2		10-May-10	X	
Off-site Soil Area 228	OFS-228-7	OFS-228-7	0	0.2		10-May-10	X	
Off-site Soil Area 228	OFS-228-8	OFS-228-8	0	0.2		10-May-10	X	
Off-site Soil Area 228	OFS-228-9	OFS-228-9	0	0.2		10-May-10	X	
Off-site Soil Area 229	OFS-229-1	OFS-229-1	0	0.2		10-May-10	X	
Off-site Soil Area 229	OFS-229-1	OFS-229-1-A	0.8	1		10-May-10	X	
Off-site Soil Area 229	OFS-229-1	OFS-829-1	0	0.2	DUP	10-May-10	X	
Off-site Soil Area 229	OFS-229-2	OFS-229-2	0	0.2		10-May-10	X	
Off-site Soil Area 229	OFS-229-3	OFS-229-3	0	0.2		10-May-10	X	
Off-site Soil Area 229	OFS-229-4	OFS-229-4	0	0.2		10-May-10	X	
Off-site Soil Area 229	OFS-229-5	OFS-229-5	0	0.2		10-May-10	X	
Off-site Soil Area 229	OFS-229-6	OFS-229-6	0	0.2		10-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 229	OFS-229-7	OFS-229-7	0	0.2		10-May-10	X	
Off-site Soil Area 229	OFS-229-8	OFS-229-8	0	0.2		10-May-10	X	
Off-site Soil Area 229	OFS-229-9	OFS-229-9	0	0.2		10-May-10	X	
Off-site Soil Area 230	OFS-230-1	OFS-230-1	0	0.2		11-May-10	X	
Off-site Soil Area 230	OFS-230-1	OFS-230-1-A	0.8	1		11-May-10	X	
Off-site Soil Area 230	OFS-230-1	OFS-830-1	0	0.2	DUP	11-May-10	X	
Off-site Soil Area 230	OFS-230-2	OFS-230-2	0	0.2		11-May-10	X	
Off-site Soil Area 230	OFS-230-3	OFS-230-3	0	0.2		11-May-10	X	
Off-site Soil Area 230	OFS-230-4	OFS-230-4	0	0.2		11-May-10	X	
Off-site Soil Area 230	OFS-230-5	OFS-230-5	0	0.2		11-May-10	X	
Off-site Soil Area 230	OFS-230-6	OFS-230-6	0	0.2		11-May-10	X	
Off-site Soil Area 230	OFS-230-7	OFS-230-7	0	0.2		11-May-10	X	
Off-site Soil Area 230	OFS-230-8	OFS-230-8	0	0.2		11-May-10	X	
Off-site Soil Area 230	OFS-230-9	OFS-230-9	0	0.2		11-May-10	X	
Off-site Soil Area 231	OFS-231-1	OFS-231-1	0	0.2		11-May-10	X	
Off-site Soil Area 231	OFS-231-1	OFS-231-1-A	0.8	1		11-May-10	X	
Off-site Soil Area 231	OFS-231-1	OFS-831-1	0	0.2	DUP	11-May-10	X	
Off-site Soil Area 231	OFS-231-2	OFS-231-2	0	0.2		11-May-10	X	
Off-site Soil Area 231	OFS-231-3	OFS-231-3	0	0.2		11-May-10	X	
Off-site Soil Area 231	OFS-231-4	OFS-231-4	0	0.2		11-May-10	X	
Off-site Soil Area 231	OFS-231-5	OFS-231-5	0	0.2		11-May-10	X	
Off-site Soil Area 231	OFS-231-6	OFS-231-6	0	0.2		11-May-10	X	
Off-site Soil Area 231	OFS-231-7	OFS-231-7	0	0.2		11-May-10	X	
Off-site Soil Area 231	OFS-231-8	OFS-231-8	0	0.2		11-May-10	X	
Off-site Soil Area 231	OFS-231-9	OFS-231-9	0	0.2		11-May-10	X	
Off-site Soil Area 232	OFS-232-1	OFS-232-1	0	0.2		11-May-10	X	
Off-site Soil Area 232	OFS-232-1	OFS-232-1-A	0.8	1		11-May-10	X	
Off-site Soil Area 232	OFS-232-1	OFS-832-1	0	0.2	DUP	11-May-10	X	
Off-site Soil Area 232	OFS-232-2	OFS-232-2	0	0.2		11-May-10	X	
Off-site Soil Area 232	OFS-232-3	OFS-232-3	0	0.2		11-May-10	X	
Off-site Soil Area 232	OFS-232-4	OFS-232-4	0	0.2		11-May-10	X	
Off-site Soil Area 232	OFS-232-5	OFS-232-5	0	0.2		11-May-10	X	
Off-site Soil Area 232	OFS-232-6	OFS-232-6	0	0.2		11-May-10	X	
Off-site Soil Area 232	OFS-232-7	OFS-232-7	0	0.2		11-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 232	OFS-232-8	OFS-232-8	0	0.2		11-May-10	X	
Off-site Soil Area 232	OFS-232-9	OFS-232-9	0	0.2		11-May-10	X	
Off-site Soil Area 233	OFS-233-1	OFS-233-1	0	0.2		11-May-10	X	
Off-site Soil Area 233	OFS-233-1	OFS-233-1-A	0.8	1		11-May-10	X	
Off-site Soil Area 233	OFS-233-1	OFS-833-1	0	0.2	DUP	11-May-10	X	
Off-site Soil Area 233	OFS-233-2	OFS-233-2	0	0.2		11-May-10	X	
Off-site Soil Area 233	OFS-233-3	OFS-233-3	0	0.2		11-May-10	X	
Off-site Soil Area 233	OFS-233-4	OFS-233-4	0	0.2		11-May-10	X	
Off-site Soil Area 233	OFS-233-5	OFS-233-5	0	0.2		11-May-10	X	
Off-site Soil Area 233	OFS-233-6	OFS-233-6	0	0.2		11-May-10	X	
Off-site Soil Area 233	OFS-233-7	OFS-233-7	0	0.2		11-May-10	X	
Off-site Soil Area 233	OFS-233-8	OFS-233-8	0	0.2		11-May-10	X	
Off-site Soil Area 233	OFS-233-9	OFS-233-9	0	0.2		11-May-10	X	
Off-site Soil Area 234	OFS-234-1	OFS-234-1	0	0.2		11-May-10	X	
Off-site Soil Area 234	OFS-234-1	OFS-234-1-A	0.8	1		11-May-10	X	
Off-site Soil Area 234	OFS-234-1	OFS-834-1	0	0.2	DUP	11-May-10	X	
Off-site Soil Area 234	OFS-234-2	OFS-234-2	0	0.2		11-May-10	X	
Off-site Soil Area 234	OFS-234-3	OFS-234-3	0	0.2		11-May-10	X	
Off-site Soil Area 234	OFS-234-4	OFS-234-4	0	0.2		11-May-10	X	
Off-site Soil Area 234	OFS-234-5	OFS-234-5	0	0.2		11-May-10	X	
Off-site Soil Area 234	OFS-234-6	OFS-234-6	0	0.2		11-May-10	X	
Off-site Soil Area 234	OFS-234-7	OFS-234-7	0	0.2		11-May-10	X	
Off-site Soil Area 234	OFS-234-8	OFS-234-8	0	0.2		11-May-10	X	
Off-site Soil Area 234	OFS-234-9	OFS-234-9	0	0.2		11-May-10	X	
Off-site Soil Area 235	OFS-235-1	OFS-235-1	0	0.2		11-May-10	X	
Off-site Soil Area 235	OFS-235-1	OFS-235-1-A	0.8	1		11-May-10	X	
Off-site Soil Area 235	OFS-235-1	OFS-835-1	0	0.2	DUP	11-May-10	X	
Off-site Soil Area 235	OFS-235-2	OFS-235-2	0	0.2		11-May-10	X	
Off-site Soil Area 235	OFS-235-3	OFS-235-3	0	0.2		11-May-10	X	
Off-site Soil Area 235	OFS-235-4	OFS-235-4	0	0.2		11-May-10	X	
Off-site Soil Area 235	OFS-235-5	OFS-235-5	0	0.2		11-May-10	X	
Off-site Soil Area 235	OFS-235-6	OFS-235-6	0	0.2		11-May-10	X	
Off-site Soil Area 235	OFS-235-7	OFS-235-7	0	0.2		11-May-10	X	
Off-site Soil Area 235	OFS-235-8	OFS-235-8	0	0.2		11-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 235	OFS-235-9	OFS-235-9	0	0.2		11-May-10	X	
Off-site Soil Area 236	OFS-236-1	OFS-236-1	0	0.2		11-May-10	X	
Off-site Soil Area 236	OFS-236-1	OFS-236-1-A	0.8	1		11-May-10	X	
Off-site Soil Area 236	OFS-236-1	OFS-836-1	0	0.2	DUP	11-May-10	X	
Off-site Soil Area 236	OFS-236-2	OFS-236-2	0	0.2		11-May-10	X	
Off-site Soil Area 236	OFS-236-3	OFS-236-3	0	0.2		11-May-10	X	
Off-site Soil Area 236	OFS-236-4	OFS-236-4	0	0.2		11-May-10	X	
Off-site Soil Area 236	OFS-236-5	OFS-236-5	0	0.2		11-May-10	X	
Off-site Soil Area 236	OFS-236-6	OFS-236-6	0	0.2		11-May-10	X	
Off-site Soil Area 236	OFS-236-7	OFS-236-7	0	0.2		11-May-10	X	
Off-site Soil Area 236	OFS-236-8	OFS-236-8	0	0.2		11-May-10	X	
Off-site Soil Area 236	OFS-236-9	OFS-236-9	0	0.2		11-May-10	X	
Off-site Soil Area 237	OFS-237-1	OFS-237-1	0	0.2		12-May-10	X	
Off-site Soil Area 237	OFS-237-1	OFS-237-1-A	0.8	1		12-May-10	X	
Off-site Soil Area 237	OFS-237-1	OFS-837-1	0	0.2	DUP	12-May-10	X	
Off-site Soil Area 237	OFS-237-2	OFS-237-2	0	0.2		12-May-10	X	
Off-site Soil Area 237	OFS-237-3	OFS-237-3	0	0.2		12-May-10	X	
Off-site Soil Area 237	OFS-237-4	OFS-237-4	0	0.2		12-May-10	X	
Off-site Soil Area 237	OFS-237-5	OFS-237-5	0	0.2		12-May-10	X	
Off-site Soil Area 237	OFS-237-6	OFS-237-6	0	0.2		12-May-10	X	
Off-site Soil Area 237	OFS-237-7	OFS-237-7	0	0.2		12-May-10	X	
Off-site Soil Area 237	OFS-237-8	OFS-237-8	0	0.2		12-May-10	X	
Off-site Soil Area 237	OFS-237-9	OFS-237-9	0	0.2		12-May-10	X	
Off-site Soil Area 238	OFS-238-1	OFS-238-1	0	0.2		11-May-10	X	
Off-site Soil Area 238	OFS-238-1	OFS-238-1-A	0.8	1		11-May-10	X	
Off-site Soil Area 238	OFS-238-1	OFS-838-1	0	0.2	DUP	11-May-10	X	
Off-site Soil Area 238	OFS-238-2	OFS-238-2	0	0.2		11-May-10	X	
Off-site Soil Area 238	OFS-238-3	OFS-238-3	0	0.2		11-May-10	X	
Off-site Soil Area 238	OFS-238-4	OFS-238-4	0	0.2		11-May-10	X	
Off-site Soil Area 238	OFS-238-5	OFS-238-5	0	0.2		11-May-10	X	
Off-site Soil Area 238	OFS-238-6	OFS-238-6	0	0.2		11-May-10	X	
Off-site Soil Area 238	OFS-238-7	OFS-238-7	0	0.2		11-May-10	X	
Off-site Soil Area 238	OFS-238-8	OFS-238-8	0	0.2		11-May-10	X	
Off-site Soil Area 238	OFS-238-9	OFS-238-9	0	0.2		11-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 239	OFS-239-1	OFS-239-1	0	0.2		11-May-10	X	
Off-site Soil Area 239	OFS-239-1	OFS-239-1-A	0.8	1		11-May-10	X	
Off-site Soil Area 239	OFS-239-1	OFS-839-1	0	0.2	DUP	11-May-10	X	
Off-site Soil Area 239	OFS-239-2	OFS-239-2	0	0.2		11-May-10	X	
Off-site Soil Area 239	OFS-239-3	OFS-239-3	0	0.2		11-May-10	X	
Off-site Soil Area 239	OFS-239-4	OFS-239-4	0	0.2		11-May-10	X	
Off-site Soil Area 239	OFS-239-5	OFS-239-5	0	0.2		11-May-10	X	
Off-site Soil Area 239	OFS-239-6	OFS-239-6	0	0.2		11-May-10	X	
Off-site Soil Area 239	OFS-239-7	OFS-239-7	0	0.2		11-May-10	X	
Off-site Soil Area 239	OFS-239-8	OFS-239-8	0	0.2		11-May-10	X	
Off-site Soil Area 239	OFS-239-9	OFS-239-9	0	0.2		11-May-10	X	
Off-site Soil Area 240	OFS-240-1	OFS-240-1	0	0.2		11-May-10	X	
Off-site Soil Area 240	OFS-240-1	OFS-240-1-A	0.8	1		11-May-10	X	
Off-site Soil Area 240	OFS-240-1	OFS-840-1	0	0.2	DUP	11-May-10	X	
Off-site Soil Area 240	OFS-240-2	OFS-240-2	0	0.2		11-May-10	X	
Off-site Soil Area 240	OFS-240-3	OFS-240-3	0	0.2		11-May-10	X	
Off-site Soil Area 240	OFS-240-4	OFS-240-4	0	0.2		11-May-10	X	
Off-site Soil Area 240	OFS-240-5	OFS-240-5	0	0.2		11-May-10	X	
Off-site Soil Area 240	OFS-240-6	OFS-240-6	0	0.2		11-May-10	X	
Off-site Soil Area 240	OFS-240-7	OFS-240-7	0	0.2		11-May-10	X	
Off-site Soil Area 240	OFS-240-8	OFS-240-8	0	0.2		11-May-10	X	
Off-site Soil Area 240	OFS-240-9	OFS-240-9	0	0.2		11-May-10	X	
Off-site Soil Area 241	OFS-241-1	OFS-241-1	0	0.2		12-May-10	X	
Off-site Soil Area 241	OFS-241-1	OFS-241-1-A	0.8	1		12-May-10	X	
Off-site Soil Area 241	OFS-241-1	OFS-841-1	0	0.2	DUP	12-May-10	X	
Off-site Soil Area 241	OFS-241-2	OFS-241-2	0	0.2		12-May-10	X	
Off-site Soil Area 241	OFS-241-3	OFS-241-3	0	0.2		12-May-10	X	
Off-site Soil Area 241	OFS-241-4	OFS-241-4	0	0.2		12-May-10	X	
Off-site Soil Area 241	OFS-241-5	OFS-241-5	0	0.2		12-May-10	X	
Off-site Soil Area 241	OFS-241-6	OFS-241-6	0	0.2		12-May-10	X	
Off-site Soil Area 241	OFS-241-7	OFS-241-7	0	0.2		12-May-10	X	
Off-site Soil Area 241	OFS-241-8	OFS-241-8	0	0.2		12-May-10	X	
Off-site Soil Area 241	OFS-241-9	OFS-241-9	0	0.2		12-May-10	X	
Off-site Soil Area 242	OFS-242-1	OFS-242-1	0	0.2		12-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 242	OFS-242-1	OFS-242-1-A	0.8	1		12-May-10	X	
Off-site Soil Area 242	OFS-242-1	OFS-842-1	0	0.2	DUP	12-May-10	X	
Off-site Soil Area 242	OFS-242-2	OFS-242-2	0	0.2		12-May-10	X	
Off-site Soil Area 242	OFS-242-3	OFS-242-3	0	0.2		12-May-10	X	
Off-site Soil Area 242	OFS-242-4	OFS-242-4	0	0.2		12-May-10	X	
Off-site Soil Area 242	OFS-242-5	OFS-242-5	0	0.2		12-May-10	X	
Off-site Soil Area 242	OFS-242-6	OFS-242-6	0	0.2		12-May-10	X	
Off-site Soil Area 242	OFS-242-7	OFS-242-7	0	0.2		12-May-10	X	
Off-site Soil Area 242	OFS-242-8	OFS-242-8	0	0.2		12-May-10	X	
Off-site Soil Area 242	OFS-242-9	OFS-242-9	0	0.2		12-May-10	X	
Off-site Soil Area 243	OFS-243-1	OFS-243-1	0	0.2		12-May-10	X	
Off-site Soil Area 243	OFS-243-1	OFS-243-1-A	0.8	1		12-May-10	X	
Off-site Soil Area 243	OFS-243-1	OFS-843-1	0	0.2	DUP	12-May-10	X	
Off-site Soil Area 243	OFS-243-2	OFS-243-2	0	0.2		12-May-10	X	
Off-site Soil Area 243	OFS-243-3	OFS-243-3	0	0.2		12-May-10	X	
Off-site Soil Area 243	OFS-243-4	OFS-243-4	0	0.2		12-May-10	X	
Off-site Soil Area 243	OFS-243-5	OFS-243-5	0	0.2		12-May-10	X	
Off-site Soil Area 243	OFS-243-6	OFS-243-6	0	0.2		12-May-10	X	
Off-site Soil Area 243	OFS-243-7	OFS-243-7	0	0.2		12-May-10	X	
Off-site Soil Area 243	OFS-243-8	OFS-243-8	0	0.2		12-May-10	X	
Off-site Soil Area 243	OFS-243-9	OFS-243-9	0	0.2		12-May-10	X	
Off-site Soil Area 244	OFS-244-1	OFS-244-1	0	0.2		12-May-10	X	
Off-site Soil Area 244	OFS-244-1	OFS-244-1-A	0.8	1		12-May-10	X	
Off-site Soil Area 244	OFS-244-1	OFS-844-1	0	0.2	DUP	12-May-10	X	
Off-site Soil Area 244	OFS-244-2	OFS-244-2	0	0.2		12-May-10	X	
Off-site Soil Area 244	OFS-244-3	OFS-244-3	0	0.2		12-May-10	X	
Off-site Soil Area 244	OFS-244-4	OFS-244-4	0	0.2		12-May-10	X	
Off-site Soil Area 244	OFS-244-5	OFS-244-5	0	0.2		12-May-10	X	
Off-site Soil Area 244	OFS-244-6	OFS-244-6	0	0.2		12-May-10	X	
Off-site Soil Area 244	OFS-244-7	OFS-244-7	0	0.2		12-May-10	X	
Off-site Soil Area 244	OFS-244-8	OFS-244-8	0	0.2		12-May-10	X	
Off-site Soil Area 244	OFS-244-9	OFS-244-9	0	0.2		12-May-10	X	
Off-site Soil Area 245	OFS-245-1	OFS-245-1	0	0.2		12-May-10	X	
Off-site Soil Area 245	OFS-245-1	OFS-245-1-A	0.8	1		12-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 245	OFS-245-1	OFS-845-1	0	0.2	DUP	12-May-10	X	
Off-site Soil Area 245	OFS-245-2	OFS-245-2	0	0.2		12-May-10	X	
Off-site Soil Area 245	OFS-245-3	OFS-245-3	0	0.2		12-May-10	X	
Off-site Soil Area 245	OFS-245-4	OFS-245-4	0	0.2		12-May-10	X	
Off-site Soil Area 245	OFS-245-5	OFS-245-5	0	0.2		12-May-10	X	
Off-site Soil Area 245	OFS-245-6	OFS-245-6	0	0.2		12-May-10	X	
Off-site Soil Area 245	OFS-245-7	OFS-245-7	0	0.2		12-May-10	X	
Off-site Soil Area 245	OFS-245-8	OFS-245-8	0	0.2		12-May-10	X	
Off-site Soil Area 245	OFS-245-9	OFS-245-9	0	0.2		12-May-10	X	
Off-site Soil Area 246	OFS-246-1	OFS-246-1	0	0.2		12-May-10	X	
Off-site Soil Area 246	OFS-246-1	OFS-246-1-A	0.8	1		12-May-10	X	
Off-site Soil Area 246	OFS-246-1	OFS-846-1	0	0.2	DUP	12-May-10	X	
Off-site Soil Area 246	OFS-246-2	OFS-246-2	0	0.2		12-May-10	X	
Off-site Soil Area 246	OFS-246-3	OFS-246-3	0	0.2		12-May-10	X	
Off-site Soil Area 246	OFS-246-4	OFS-246-4	0	0.2		12-May-10	X	
Off-site Soil Area 246	OFS-246-5	OFS-246-5	0	0.2		12-May-10	X	
Off-site Soil Area 246	OFS-246-6	OFS-246-6	0	0.2		12-May-10	X	
Off-site Soil Area 246	OFS-246-7	OFS-246-7	0	0.2		12-May-10	X	
Off-site Soil Area 246	OFS-246-8	OFS-246-8	0	0.2		12-May-10	X	
Off-site Soil Area 246	OFS-246-9	OFS-246-9	0	0.2		12-May-10	X	
Off-site Soil Area 247	OFS-247-1	OFS-247-1	0	0.2		12-May-10	X	
Off-site Soil Area 247	OFS-247-1	OFS-247-1-A	0.8	1		12-May-10	X	
Off-site Soil Area 247	OFS-247-1	OFS-847-1	0	0.2	DUP	12-May-10	X	
Off-site Soil Area 247	OFS-247-2	OFS-247-2	0	0.2		12-May-10	X	
Off-site Soil Area 247	OFS-247-3	OFS-247-3	0	0.2		12-May-10	X	
Off-site Soil Area 247	OFS-247-4	OFS-247-4	0	0.2		12-May-10	X	
Off-site Soil Area 247	OFS-247-5	OFS-247-5	0	0.2		12-May-10	X	
Off-site Soil Area 247	OFS-247-6	OFS-247-6	0	0.2		12-May-10	X	
Off-site Soil Area 247	OFS-247-7	OFS-247-7	0	0.2		12-May-10	X	
Off-site Soil Area 247	OFS-247-8	OFS-247-8	0	0.2		12-May-10	X	
Off-site Soil Area 247	OFS-247-9	OFS-247-9	0	0.2		12-May-10	X	
Off-site Soil Area 248	OFS-248-1	OFS-248-1	0	0.2		12-May-10	X	
Off-site Soil Area 248	OFS-248-1	OFS-248-1-A	0.8	1		12-May-10	X	
Off-site Soil Area 248	OFS-248-1	OFS-848-1	0	0.2	DUP	12-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 248	OFS-248-2	OFS-248-2	0	0.2		12-May-10	X	
Off-site Soil Area 248	OFS-248-3	OFS-248-3	0	0.2		12-May-10	X	
Off-site Soil Area 248	OFS-248-4	OFS-248-4	0	0.2		12-May-10	X	
Off-site Soil Area 248	OFS-248-5	OFS-248-5	0	0.2		12-May-10	X	
Off-site Soil Area 248	OFS-248-6	OFS-248-6	0	0.2		12-May-10	X	
Off-site Soil Area 248	OFS-248-7	OFS-248-7	0	0.2		12-May-10	X	
Off-site Soil Area 248	OFS-248-8	OFS-248-8	0	0.2		12-May-10	X	
Off-site Soil Area 248	OFS-248-9	OFS-248-9	0	0.2		12-May-10	X	
Off-site Soil Area 249	OFS-249-1	OFS-249-1	0	0.2		12-May-10	X	
Off-site Soil Area 249	OFS-249-1	OFS-249-1-A	0.8	1		12-May-10	X	
Off-site Soil Area 249	OFS-249-1	OFS-849-1	0	0.2	DUP	12-May-10	X	
Off-site Soil Area 249	OFS-249-2	OFS-249-2	0	0.2		12-May-10	X	
Off-site Soil Area 249	OFS-249-3	OFS-249-3	0	0.2		12-May-10	X	
Off-site Soil Area 249	OFS-249-4	OFS-249-4	0	0.2		12-May-10	X	
Off-site Soil Area 249	OFS-249-5	OFS-249-5	0	0.2		12-May-10	X	
Off-site Soil Area 249	OFS-249-6	OFS-249-6	0	0.2		12-May-10	X	
Off-site Soil Area 249	OFS-249-7	OFS-249-7	0	0.2		12-May-10	X	
Off-site Soil Area 249	OFS-249-8	OFS-249-8	0	0.2		12-May-10	X	
Off-site Soil Area 249	OFS-249-9	OFS-249-9	0	0.2		12-May-10	X	
Off-site Soil Area 250	OFS-250-1	OFS-250-1	0	0.2		12-May-10	X	
Off-site Soil Area 250	OFS-250-1	OFS-250-1-A	0.8	1		12-May-10	X	
Off-site Soil Area 250	OFS-250-1	OFS-850-1	0	0.2	DUP	12-May-10	X	
Off-site Soil Area 250	OFS-250-2	OFS-250-2	0	0.2		12-May-10	X	
Off-site Soil Area 250	OFS-250-3	OFS-250-3	0	0.2		12-May-10	X	
Off-site Soil Area 250	OFS-250-4	OFS-250-4	0	0.2		12-May-10	X	
Off-site Soil Area 250	OFS-250-5	OFS-250-5	0	0.2		12-May-10	X	
Off-site Soil Area 250	OFS-250-6	OFS-250-6	0	0.2		12-May-10	X	
Off-site Soil Area 250	OFS-250-7	OFS-250-7	0	0.2		12-May-10	X	
Off-site Soil Area 250	OFS-250-8	OFS-250-8	0	0.2		12-May-10	X	
Off-site Soil Area 250	OFS-250-9	OFS-250-9	0	0.2		12-May-10	X	
Off-site Soil Area 251	OFS-251-1	OFS-251-1	0	0.2		12-May-10	X	
Off-site Soil Area 251	OFS-251-1	OFS-251-1-A	0.8	1		12-May-10	X	
Off-site Soil Area 251	OFS-251-1	OFS-851-1	0	0.2	DUP	12-May-10	X	
Off-site Soil Area 251	OFS-251-2	OFS-251-2	0	0.2		12-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 251	OFS-251-3	OFS-251-3	0	0.2		12-May-10	X	
Off-site Soil Area 251	OFS-251-4	OFS-251-4	0	0.2		12-May-10	X	
Off-site Soil Area 251	OFS-251-5	OFS-251-5	0	0.2		12-May-10	X	
Off-site Soil Area 251	OFS-251-6	OFS-251-6	0	0.2		12-May-10	X	
Off-site Soil Area 251	OFS-251-7	OFS-251-7	0	0.2		12-May-10	X	
Off-site Soil Area 251	OFS-251-8	OFS-251-8	0	0.2		12-May-10	X	
Off-site Soil Area 251	OFS-251-9	OFS-251-9	0	0.2		12-May-10	X	
Off-site Soil Area 252	OFS-252-1	OFS-252-1	0	0.2		12-May-10	X	
Off-site Soil Area 252	OFS-252-1	OFS-252-1-A	0.8	1		12-May-10	X	
Off-site Soil Area 252	OFS-252-1	OFS-852-1	0	0.2	DUP	12-May-10	X	
Off-site Soil Area 252	OFS-252-2	OFS-252-2	0	0.2		12-May-10	X	
Off-site Soil Area 252	OFS-252-3	OFS-252-3	0	0.2		12-May-10	X	
Off-site Soil Area 252	OFS-252-4	OFS-252-4	0	0.2		12-May-10	X	
Off-site Soil Area 252	OFS-252-5	OFS-252-5	0	0.2		12-May-10	X	
Off-site Soil Area 252	OFS-252-6	OFS-252-6	0	0.2		12-May-10	X	
Off-site Soil Area 252	OFS-252-7	OFS-252-7	0	0.2		12-May-10	X	
Off-site Soil Area 252	OFS-252-8	OFS-252-8	0	0.2		12-May-10	X	
Off-site Soil Area 252	OFS-252-9	OFS-252-9	0	0.2		12-May-10	X	
Off-site Soil Area 253	OFS-253-1	OFS-253-1	0	0.2		12-May-10	X	
Off-site Soil Area 253	OFS-253-1	OFS-253-1-A	0.8	1		12-May-10	X	
Off-site Soil Area 253	OFS-253-1	OFS-853-1	0	0.2	DUP	12-May-10	X	
Off-site Soil Area 253	OFS-253-2	OFS-253-2	0	0.2		12-May-10	X	
Off-site Soil Area 253	OFS-253-3	OFS-253-3	0	0.2		12-May-10	X	
Off-site Soil Area 253	OFS-253-4	OFS-253-4	0	0.2		12-May-10	X	
Off-site Soil Area 253	OFS-253-5	OFS-253-5	0	0.2		12-May-10	X	
Off-site Soil Area 253	OFS-253-6	OFS-253-6	0	0.2		12-May-10	X	
Off-site Soil Area 253	OFS-253-7	OFS-253-7	0	0.2		12-May-10	X	
Off-site Soil Area 253	OFS-253-8	OFS-253-8	0	0.2		12-May-10	X	
Off-site Soil Area 253	OFS-253-9	OFS-253-9	0	0.2		12-May-10	X	
Off-site Soil Area 254	OFS-254-1	OFS-254-1	0	0.2		13-May-10	X	
Off-site Soil Area 254	OFS-254-1	OFS-254-1-A	0.8	1		13-May-10	X	
Off-site Soil Area 254	OFS-254-1	OFS-854-1	0	0.2	DUP	13-May-10	X	
Off-site Soil Area 254	OFS-254-2	OFS-254-2	0	0.2		13-May-10	X	
Off-site Soil Area 254	OFS-254-3	OFS-254-3	0	0.2		13-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 254	OFS-254-4	OFS-254-4	0	0.2		13-May-10	X	
Off-site Soil Area 254	OFS-254-5	OFS-254-5	0	0.2		13-May-10	X	
Off-site Soil Area 254	OFS-254-6	OFS-254-6	0	0.2		13-May-10	X	
Off-site Soil Area 254	OFS-254-7	OFS-254-7	0	0.2		13-May-10	X	
Off-site Soil Area 254	OFS-254-8	OFS-254-8	0	0.2		13-May-10	X	
Off-site Soil Area 254	OFS-254-9	OFS-254-9	0	0.2		13-May-10	X	
Off-site Soil Area 255	OFS-255-1	OFS-255-1	0	0.2		13-May-10	X	
Off-site Soil Area 255	OFS-255-1	OFS-255-1-A	0.8	1		13-May-10	X	
Off-site Soil Area 255	OFS-255-1	OFS-855-1	0	0.2	DUP	13-May-10	X	
Off-site Soil Area 255	OFS-255-2	OFS-255-2	0	0.2		13-May-10	X	
Off-site Soil Area 255	OFS-255-3	OFS-255-3	0	0.2		13-May-10	X	
Off-site Soil Area 255	OFS-255-4	OFS-255-4	0	0.2		13-May-10	X	
Off-site Soil Area 255	OFS-255-5	OFS-255-5	0	0.2		13-May-10	X	
Off-site Soil Area 255	OFS-255-6	OFS-255-6	0	0.2		13-May-10	X	
Off-site Soil Area 255	OFS-255-7	OFS-255-7	0	0.2		13-May-10	X	
Off-site Soil Area 255	OFS-255-8	OFS-255-8	0	0.2		13-May-10	X	
Off-site Soil Area 255	OFS-255-9	OFS-255-9	0	0.2		13-May-10	X	
Off-site Soil Area 256	OFS-256-1	OFS-256-1	0	0.2		13-May-10	X	
Off-site Soil Area 256	OFS-256-1	OFS-256-1-A	0.8	1		13-May-10	X	
Off-site Soil Area 256	OFS-256-1	OFS-856-1	0	0.2	DUP	13-May-10	X	
Off-site Soil Area 256	OFS-256-2	OFS-256-2	0	0.2		13-May-10	X	
Off-site Soil Area 256	OFS-256-3	OFS-256-3	0	0.2		13-May-10	X	
Off-site Soil Area 256	OFS-256-4	OFS-256-4	0	0.2		13-May-10	X	
Off-site Soil Area 256	OFS-256-5	OFS-256-5	0	0.2		13-May-10	X	
Off-site Soil Area 256	OFS-256-6	OFS-256-6	0	0.2		13-May-10	X	
Off-site Soil Area 256	OFS-256-7	OFS-256-7	0	0.2		13-May-10	X	
Off-site Soil Area 256	OFS-256-8	OFS-256-8	0	0.2		13-May-10	X	
Off-site Soil Area 256	OFS-256-9	OFS-256-9	0	0.2		13-May-10	X	
Off-site Soil Area 257	OFS-257-1	OFS-257-1	0	0.2		13-May-10	X	
Off-site Soil Area 257	OFS-257-1	OFS-257-1-A	0.8	1		13-May-10	X	
Off-site Soil Area 257	OFS-257-1	OFS-857-1	0	0.2	DUP	13-May-10	X	
Off-site Soil Area 257	OFS-257-2	OFS-257-2	0	0.2		13-May-10	X	
Off-site Soil Area 257	OFS-257-3	OFS-257-3	0	0.2		13-May-10	X	
Off-site Soil Area 257	OFS-257-4	OFS-257-4	0	0.2		13-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 257	OFS-257-5	OFS-257-5	0	0.2		13-May-10	X	
Off-site Soil Area 257	OFS-257-6	OFS-257-6	0	0.2		13-May-10	X	
Off-site Soil Area 257	OFS-257-7	OFS-257-7	0	0.2		13-May-10	X	
Off-site Soil Area 257	OFS-257-8	OFS-257-8	0	0.2		13-May-10	X	
Off-site Soil Area 257	OFS-257-9	OFS-257-9	0	0.2		13-May-10	X	
Off-site Soil Area 258	OFS-258-1	OFS-258-1	0	0.2		13-May-10	X	
Off-site Soil Area 258	OFS-258-1	OFS-258-1-A	0.8	1		13-May-10	X	
Off-site Soil Area 258	OFS-258-1	OFS-858-1	0	0.2	DUP	13-May-10	X	
Off-site Soil Area 258	OFS-258-2	OFS-258-2	0	0.2		13-May-10	X	
Off-site Soil Area 258	OFS-258-3	OFS-258-3	0	0.2		13-May-10	X	
Off-site Soil Area 258	OFS-258-4	OFS-258-4	0	0.2		13-May-10	X	
Off-site Soil Area 258	OFS-258-5	OFS-258-5	0	0.2		13-May-10	X	
Off-site Soil Area 258	OFS-258-6	OFS-258-6	0	0.2		13-May-10	X	
Off-site Soil Area 258	OFS-258-7	OFS-258-7	0	0.2		13-May-10	X	
Off-site Soil Area 258	OFS-258-8	OFS-258-8	0	0.2		13-May-10	X	
Off-site Soil Area 258	OFS-258-9	OFS-258-9	0	0.2		13-May-10	X	
Off-site Soil Area 259	OFS-259-1	OFS-259-1	0	0.2		13-May-10	X	
Off-site Soil Area 259	OFS-259-1	OFS-259-1-A	0.8	1		13-May-10	X	
Off-site Soil Area 259	OFS-259-1	OFS-859-1	0	0.2	DUP	13-May-10	X	
Off-site Soil Area 259	OFS-259-2	OFS-259-2	0	0.2		13-May-10	X	
Off-site Soil Area 259	OFS-259-3	OFS-259-3	0	0.2		13-May-10	X	
Off-site Soil Area 259	OFS-259-4	OFS-259-4	0	0.2		13-May-10	X	
Off-site Soil Area 259	OFS-259-5	OFS-259-5	0	0.2		13-May-10	X	
Off-site Soil Area 259	OFS-259-6	OFS-259-6	0	0.2		13-May-10	X	
Off-site Soil Area 259	OFS-259-7	OFS-259-7	0	0.2		13-May-10	X	
Off-site Soil Area 259	OFS-259-8	OFS-259-8	0	0.2		13-May-10	X	
Off-site Soil Area 259	OFS-259-9	OFS-259-9	0	0.2		13-May-10	X	
Off-site Soil Area 260	OFS-260-1	OFS-260-1	0	0.2		13-May-10	X	
Off-site Soil Area 260	OFS-260-1	OFS-260-1-A	0.8	1		13-May-10	X	
Off-site Soil Area 260	OFS-260-1	OFS-860-1	0	0.2	DUP	13-May-10	X	
Off-site Soil Area 260	OFS-260-2	OFS-260-2	0	0.2		13-May-10	X	
Off-site Soil Area 260	OFS-260-3	OFS-260-3	0	0.2		13-May-10	X	
Off-site Soil Area 260	OFS-260-4	OFS-260-4	0	0.2		13-May-10	X	
Off-site Soil Area 260	OFS-260-5	OFS-260-5	0	0.2		13-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 260	OFS-260-6	OFS-260-6	0	0.2		13-May-10	X	
Off-site Soil Area 260	OFS-260-7	OFS-260-7	0	0.2		13-May-10	X	
Off-site Soil Area 260	OFS-260-8	OFS-260-8	0	0.2		13-May-10	X	
Off-site Soil Area 260	OFS-260-9	OFS-260-9	0	0.2		13-May-10	X	
Off-site Soil Area 261	OFS-261-1	OFS-261-1	0	0.2		13-May-10	X	
Off-site Soil Area 261	OFS-261-1	OFS-261-1-A	0.8	1		13-May-10	X	
Off-site Soil Area 261	OFS-261-1	OFS-861-1	0	0.2	DUP	13-May-10	X	
Off-site Soil Area 261	OFS-261-2	OFS-261-2	0	0.2		13-May-10	X	
Off-site Soil Area 261	OFS-261-3	OFS-261-3	0	0.2		13-May-10	X	
Off-site Soil Area 261	OFS-261-4	OFS-261-4	0	0.2		13-May-10	X	
Off-site Soil Area 261	OFS-261-5	OFS-261-5	0	0.2		13-May-10	X	
Off-site Soil Area 261	OFS-261-6	OFS-261-6	0	0.2		13-May-10	X	
Off-site Soil Area 261	OFS-261-7	OFS-261-7	0	0.2		13-May-10	X	
Off-site Soil Area 261	OFS-261-8	OFS-261-8	0	0.2		13-May-10	X	
Off-site Soil Area 261	OFS-261-9	OFS-261-9	0	0.2		13-May-10	X	
Off-site Soil Area 262	OFS-262-1	OFS-262-1	0	0.2		13-May-10	X	
Off-site Soil Area 262	OFS-262-1	OFS-262-1-A	0.8	1		13-May-10	X	
Off-site Soil Area 262	OFS-262-1	OFS-862-1	0	0.2	DUP	13-May-10	X	
Off-site Soil Area 262	OFS-262-2	OFS-262-2	0	0.2		13-May-10	X	
Off-site Soil Area 262	OFS-262-3	OFS-262-3	0	0.2		13-May-10	X	
Off-site Soil Area 262	OFS-262-4	OFS-262-4	0	0.2		13-May-10	X	
Off-site Soil Area 262	OFS-262-5	OFS-262-5	0	0.2		13-May-10	X	
Off-site Soil Area 262	OFS-262-6	OFS-262-6	0	0.2		13-May-10	X	
Off-site Soil Area 262	OFS-262-7	OFS-262-7	0	0.2		13-May-10	X	
Off-site Soil Area 262	OFS-262-8	OFS-262-8	0	0.2		13-May-10	X	
Off-site Soil Area 262	OFS-262-9	OFS-262-9	0	0.2		13-May-10	X	
Off-site Soil Area 263	OFS-263-1	OFS-263-1	0	0.2		13-May-10	X	
Off-site Soil Area 263	OFS-263-1	OFS-263-1-A	0.8	1		13-May-10	X	
Off-site Soil Area 263	OFS-263-1	OFS-863-1	0	0.2	DUP	13-May-10	X	
Off-site Soil Area 263	OFS-263-2	OFS-263-2	0	0.2		13-May-10	X	
Off-site Soil Area 263	OFS-263-3	OFS-263-3	0	0.2		13-May-10	X	
Off-site Soil Area 263	OFS-263-4	OFS-263-4	0	0.2		13-May-10	X	
Off-site Soil Area 263	OFS-263-5	OFS-263-5	0	0.2		13-May-10	X	
Off-site Soil Area 263	OFS-263-6	OFS-263-6	0	0.2		13-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 263	OFS-263-7	OFS-263-7	0	0.2		13-May-10	X	
Off-site Soil Area 263	OFS-263-8	OFS-263-8	0	0.2		13-May-10	X	
Off-site Soil Area 263	OFS-263-9	OFS-263-9	0	0.2		13-May-10	X	
Off-site Soil Area 264	OFS-264-1	OFS-264-1	0	0.2		13-May-10	X	
Off-site Soil Area 264	OFS-264-1	OFS-264-1-A	0.8	1		13-May-10	X	
Off-site Soil Area 264	OFS-264-1	OFS-864-1	0	0.2	DUP	13-May-10	X	
Off-site Soil Area 264	OFS-264-2	OFS-264-2	0	0.2		13-May-10	X	
Off-site Soil Area 264	OFS-264-3	OFS-264-3	0	0.2		13-May-10	X	
Off-site Soil Area 264	OFS-264-4	OFS-264-4	0	0.2		13-May-10	X	
Off-site Soil Area 264	OFS-264-5	OFS-264-5	0	0.2		13-May-10	X	
Off-site Soil Area 264	OFS-264-6	OFS-264-6	0	0.2		13-May-10	X	
Off-site Soil Area 264	OFS-264-7	OFS-264-7	0	0.2		13-May-10	X	
Off-site Soil Area 264	OFS-264-8	OFS-264-8	0	0.2		13-May-10	X	
Off-site Soil Area 264	OFS-264-9	OFS-264-9	0	0.2		13-May-10	X	
Off-site Soil Area 265	OFS-265-1	OFS-265-1	0	0.2		13-May-10	X	
Off-site Soil Area 265	OFS-265-1	OFS-265-1-A	0.8	1		13-May-10	X	
Off-site Soil Area 265	OFS-265-1	OFS-865-1	0	0.2	DUP	13-May-10	X	
Off-site Soil Area 265	OFS-265-2	OFS-265-2	0	0.2		13-May-10	X	
Off-site Soil Area 265	OFS-265-3	OFS-265-3	0	0.2		13-May-10	X	
Off-site Soil Area 265	OFS-265-4	OFS-265-4	0	0.2		13-May-10	X	
Off-site Soil Area 265	OFS-265-5	OFS-265-5	0	0.2		13-May-10	X	
Off-site Soil Area 265	OFS-265-6	OFS-265-6	0	0.2		13-May-10	X	
Off-site Soil Area 265	OFS-265-7	OFS-265-7	0	0.2		13-May-10	X	
Off-site Soil Area 265	OFS-265-8	OFS-265-8	0	0.2		13-May-10	X	
Off-site Soil Area 265	OFS-265-9	OFS-265-9	0	0.2		13-May-10	X	
Off-site Soil Area 266	OFS-266-1	OFS-266-1	0	0.2		13-May-10	X	
Off-site Soil Area 266	OFS-266-1	OFS-266-1-A	0.8	1		13-May-10	X	
Off-site Soil Area 266	OFS-266-1	OFS-866-1	0	0.2	DUP	13-May-10	X	
Off-site Soil Area 266	OFS-266-2	OFS-266-2	0	0.2		13-May-10	X	
Off-site Soil Area 266	OFS-266-3	OFS-266-3	0	0.2		13-May-10	X	
Off-site Soil Area 266	OFS-266-4	OFS-266-4	0	0.2		13-May-10	X	
Off-site Soil Area 266	OFS-266-5	OFS-266-5	0	0.2		13-May-10	X	
Off-site Soil Area 266	OFS-266-6	OFS-266-6	0	0.2		13-May-10	X	
Off-site Soil Area 266	OFS-266-7	OFS-266-7	0	0.2		13-May-10	X	

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP
Off-site Soil Area 266	OFS-266-8	OFS-266-8	0	0.2		13-May-10	X	
Off-site Soil Area 266	OFS-266-9	OFS-266-9	0	0.2		13-May-10	X	
Off-site Soil Area 267	OFS-267-1	OFS-267-1	0	0.2		30-Jun-10	X	
Off-site Soil Area 267	OFS-267-1	OFS-267-1-A	0.8	1		30-Jun-10	X	
Off-site Soil Area 267	OFS-267-1	OFS-867-1	0	0.2	DUP	30-Jun-10	X	
Off-site Soil Area 267	OFS-267-2	OFS-267-2	0	0.2		30-Jun-10	X	
Off-site Soil Area 267	OFS-267-3	OFS-267-3	0	0.2		30-Jun-10	X	
Off-site Soil Area 267	OFS-267-4	OFS-267-4	0	0.2		30-Jun-10	X	
Off-site Soil Area 267	OFS-267-5	OFS-267-5	0	0.2		30-Jun-10	X	
Off-site Soil Area 267	OFS-267-6	OFS-267-6	0	0.2		30-Jun-10	X	
Off-site Soil Area 267	OFS-267-7	OFS-267-7	0	0.2		30-Jun-10	X	
Off-site Soil Area 267	OFS-267-8	OFS-267-8	0	0.2		30-Jun-10	X	
Off-site Soil Area 267	OFS-267-9	OFS-267-9	0	0.2		30-Jun-10	X	
Off-site Soil Area 268	OFS-268-1	OFS-268-1	0	0.2		30-Jun-10	X	
Off-site Soil Area 268	OFS-268-1	OFS-268-1-A	0.8	1		30-Jun-10	X	
Off-site Soil Area 268	OFS-268-1	OFS-868-1	0	0.2	DUP	30-Jun-10	X	
Off-site Soil Area 268	OFS-268-2	OFS-268-2	0	0.2		30-Jun-10	X	
Off-site Soil Area 268	OFS-268-3	OFS-268-3	0	0.2		30-Jun-10	X	
Off-site Soil Area 268	OFS-268-4	OFS-268-4	0	0.2		30-Jun-10	X	
Off-site Soil Area 268	OFS-268-5	OFS-268-5	0	0.2		30-Jun-10	X	
Off-site Soil Area 268	OFS-268-6	OFS-268-6	0	0.2		30-Jun-10	X	
Off-site Soil Area 268	OFS-268-7	OFS-268-7	0	0.2		30-Jun-10	X	
Off-site Soil Area 268	OFS-268-8	OFS-268-8	0	0.2		30-Jun-10	X	
Off-site Soil Area 268	OFS-268-9	OFS-268-9	0	0.2		30-Jun-10	X	
Toxicity Characteristic Leaching Procedure	TCLP-1	TCLP-1-0-0_5	0	0.5		3-May-10	X	X
Toxicity Characteristic Leaching Procedure	TCLP-11	TCLP-11-0-0_5	0	0.5		3-May-10	X	X
Toxicity Characteristic Leaching Procedure	TCLP-12	TCLP-12-0-0_5	0	0.5		8-May-10	X	X
Toxicity Characteristic Leaching Procedure	TCLP-2	TCLP-2-0-0_5	0	0.5		8-May-10	X	X
Toxicity Characteristic Leaching Procedure	TCLP-3	TCLP-3-0-0_5	0	0.5		8-May-10	X	X
Toxicity Characteristic Leaching Procedure	TCLP-4	TCLP-4-0-0_5	0	0.5		8-May-10	X	X
Toxicity Characteristic Leaching Procedure	TCLP-5	TCLP-5-0-0_5	0	0.5		8-May-10	X	X
Toxicity Characteristic Leaching Procedure	TCLP-6	TCLP-6-0-0_5	0	0.5		8-May-10	X	X
Toxicity Characteristic Leaching Procedure	TCLP-7	TCLP-7-0-0_5	0	0.5		8-May-10	X	X
Toxicity Characteristic Leaching Procedure	TCLP-8	TCLP-8-0-0_5	0	0.5		8-May-10	X	X

Table A-2: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Analyses Summary

Sample Group	Point ID	Sample ID	Start Depth (Feet)	End Depth (Feet)	Duplicate Sample	Sample Date	Metals	TCLP

Note:

Dup = Duplicate sample

TCLP = Toxicity Characteristic Leaching Procedure

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Background Soil Type 1	ALUMINUM	13300		24900		mg/kg	BKG-129	30 / 30	-
Background Soil Type 1	ANTIMONY	0.75	J	1	J	mg/kg	BKG-133	9 / 30	6.1 - 6.9
Background Soil Type 1	ARSENIC	18.3		56.4	J	mg/kg	BKG-140	30 / 30	-
Background Soil Type 1	BARIUM	137		373		mg/kg	BKG-930	30 / 30	-
Background Soil Type 1	BERYLLIUM	0.13	J	0.86		mg/kg	BKG-136	27 / 30	0.44 - 0.6
Background Soil Type 1	CADMIUM	0.91		2.6		mg/kg	BKG-127	30 / 30	-
Background Soil Type 1	CALCIUM	2500		68900		mg/kg	BKG-132	30 / 30	-
Background Soil Type 1	CHROMIUM	12.8		57.7		mg/kg	BKG-138	30 / 30	-
Background Soil Type 1	COBALT	8.2		19.8		mg/kg	BKG-138	30 / 30	-
Background Soil Type 1	COPPER	33.2	J	109	J-	mg/kg	BKG-930	30 / 30	-
Background Soil Type 1	CYANIDE	0.27	J	0.27	J	mg/kg	BKG-134	1 / 30	2.6 - 3
Background Soil Type 1	IRON	21200		37300		mg/kg	BKG-136	30 / 30	-
Background Soil Type 1	LEAD	8.4		35		mg/kg	BKG-118	30 / 30	-
Background Soil Type 1	MAGNESIUM	4790		13500		mg/kg	BKG-128	30 / 30	-
Background Soil Type 1	MANGANESE	350		2470		mg/kg	BKG-930	30 / 30	-
Background Soil Type 1	MERCURY	0.049	J	0.12		mg/kg	BKG-119	10 / 30	0.1 - 0.12
Background Soil Type 1	NICKEL	12.7		52.9		mg/kg	BKG-125	30 / 30	-
Background Soil Type 1	POTASSIUM	1500		4000		mg/kg	BKG-134	30 / 30	-
Background Soil Type 1	SELENIUM	0.49	J	0.76	J	mg/kg	BKG-115	14 / 30	3.7 - 4.2
Background Soil Type 1	SILVER	0.05	J	0.23	J	mg/kg	BKG-930	9 / 30	1 - 1.2
Background Soil Type 1	SODIUM	19.3	J	98.4	J	mg/kg	BKG-132	28 / 30	18.7 - 551
Background Soil Type 1	Sulfate	2.8	J	86		mg/kg	BKG-115	19 / 30	-
Background Soil Type 1	THALLIUM	0.43	J	6.1	J	mg/kg	BKG-132	16 / 30	2.4 - 2.9
Background Soil Type 1	VANADIUM	33.6		83.4		mg/kg	BKG-128	30 / 30	-
Background Soil Type 1	ZINC	55	J	136		mg/kg	BKG-116	30 / 30	-
Off-site Soil Area 149	ALUMINUM	11700		17800		mg/kg	OFS-149-1	10 / 10	-
Off-site Soil Area 149	ANTIMONY	0.53	J	1.9	J	mg/kg	OFS-149-8	10 / 10	-
Off-site Soil Area 149	ARSENIC	12.1		33.1		mg/kg	OFS-149-6	10 / 10	-
Off-site Soil Area 149	BARIUM	131		247		mg/kg	OFS-149-3	10 / 10	-
Off-site Soil Area 149	CADMIUM	0.61		2.3		mg/kg	OFS-149-6	10 / 10	-
Off-site Soil Area 149	CALCIUM	4060		18300		mg/kg	OFS-149-9	10 / 10	-
Off-site Soil Area 149	CHROMIUM	13.3		22.4		mg/kg	OFS-149-3	10 / 10	-
Off-site Soil Area 149	COBALT	8.6		14.3		mg/kg	OFS-149-7	10 / 10	-
Off-site Soil Area 149	COPPER	44.8		3550		mg/kg	OFS-149-8	10 / 10	-
Off-site Soil Area 149	CYANIDE	0.19	J	0.23	J	mg/kg	OFS-149-9	2 / 10	2.4 - 2.8
Off-site Soil Area 149	IRON	18300		26800		mg/kg	OFS-149-7	10 / 10	-
Off-site Soil Area 149	LEAD	23.7		362		mg/kg	OFS-149-6	10 / 10	-
Off-site Soil Area 149	MAGNESIUM	4770		7250		mg/kg	OFS-149-1	10 / 10	-
Off-site Soil Area 149	MANGANESE	507		653		mg/kg	OFS-149-9	10 / 10	-
Off-site Soil Area 149	MERCURY	0.046	J	2.3		mg/kg	OFS-149-6	10 / 10	-
Off-site Soil Area 149	NICKEL	14		37.8		mg/kg	OFS-149-8	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 149	POTASSIUM	2390	J+	4160	J+	mg/kg	OFS-149-3	10 / 10	-
Off-site Soil Area 149	SELENIUM	9.2	J-	9.2	J-	mg/kg	OFS-149-6	1 / 10	3.4 - 4
Off-site Soil Area 149	SILVER	0.13	J	1.2		mg/kg	OFS-149-8	9 / 10	1.1 - 1.1
Off-site Soil Area 149	SODIUM	81.4	J	142	J	mg/kg	OFS-149-1	10 / 10	-
Off-site Soil Area 149	VANADIUM	32.3		42.9		mg/kg	OFS-149-1	10 / 10	-
Off-site Soil Area 149	ZINC	97.4		566		mg/kg	OFS-149-6	10 / 10	-
Off-site Soil Area 150	ALUMINUM	11400		17300		mg/kg	OFS-150-1	10 / 10	-
Off-site Soil Area 150	ANTIMONY	0.4	J	0.68	J	mg/kg	OFS-150-1	10 / 10	-
Off-site Soil Area 150	ARSENIC	9.4		22.5		mg/kg	OFS-150-5	10 / 10	-
Off-site Soil Area 150	BARIUM	74.1		146		mg/kg	OFS-150-1	10 / 10	-
Off-site Soil Area 150	CADMIUM	0.43	J	0.81		mg/kg	OFS-150-1	10 / 10	-
Off-site Soil Area 150	CALCIUM	4280		10700		mg/kg	OFS-150-8	10 / 10	-
Off-site Soil Area 150	CHROMIUM	19.7		32.6		mg/kg	OFS-150-5	10 / 10	-
Off-site Soil Area 150	COBALT	10.8		15.4		mg/kg	OFS-150-1	10 / 10	-
Off-site Soil Area 150	COPPER	42.6		70.4		mg/kg	OFS-150-1	10 / 10	-
Off-site Soil Area 150	CYANIDE	0.18	J	0.47	J	mg/kg	OFS-150-8	1 / 10	0.19 - 2.9
Off-site Soil Area 150	IRON	18500		27800		mg/kg	OFS-150-1	10 / 10	-
Off-site Soil Area 150	LEAD	10.8		17.7		mg/kg	OFS-150-1	10 / 10	-
Off-site Soil Area 150	MAGNESIUM	5120		7590		mg/kg	OFS-150-1	10 / 10	-
Off-site Soil Area 150	MANGANESE	260		764		mg/kg	OFS-150-8	10 / 10	-
Off-site Soil Area 150	NICKEL	17.1		36.3		mg/kg	OFS-150-5	10 / 10	-
Off-site Soil Area 150	POTASSIUM	2120	J+	5720	J+	mg/kg	OFS-150-1	10 / 10	-
Off-site Soil Area 150	SILVER	0.078	J	0.078	J	mg/kg	OFS-150-1	0 / 10	1 - 1.3
Off-site Soil Area 150	SODIUM	103	J	475	J	mg/kg	OFS-150-5	10 / 10	-
Off-site Soil Area 150	VANADIUM	40.1		58.9		mg/kg	OFS-150-1	10 / 10	-
Off-site Soil Area 150	ZINC	47.6		260		mg/kg	OFS-150-3	10 / 10	-
Off-site Soil Area 151	ALUMINUM	9520		13700		mg/kg	OFS-151-9	10 / 10	-
Off-site Soil Area 151	ANTIMONY	0.37	J	1.2	J	mg/kg	OFS-151-4	10 / 10	-
Off-site Soil Area 151	ARSENIC	15.6		96.5		mg/kg	OFS-151-4	10 / 10	-
Off-site Soil Area 151	BARIUM	138		194		mg/kg	OFS-151-7	10 / 10	-
Off-site Soil Area 151	BERYLLIUM	0.53		0.53		mg/kg	OFS-151-3	1 / 10	0.33 - 0.51
Off-site Soil Area 151	CADMIUM	1		3.7		mg/kg	OFS-151-4	10 / 10	-
Off-site Soil Area 151	CALCIUM	3910		17200		mg/kg	OFS-151-1	10 / 10	-
Off-site Soil Area 151	CHROMIUM	12.5		19.5		mg/kg	OFS-151-3	10 / 10	-
Off-site Soil Area 151	COBALT	7.1		13.4		mg/kg	OFS-151-3	10 / 10	-
Off-site Soil Area 151	COPPER	52.4		166		mg/kg	OFS-151-4	10 / 10	-
Off-site Soil Area 151	CYANIDE	0.18	J	0.38	J	mg/kg	OFS-151-1	5 / 10	2.5 - 2.8
Off-site Soil Area 151	IRON	16600		33400		mg/kg	OFS-151-4	10 / 10	-
Off-site Soil Area 151	LEAD	55.2		207		mg/kg	OFS-151-1	10 / 10	-
Off-site Soil Area 151	MAGNESIUM	3410		8820		mg/kg	OFS-151-4	10 / 10	-
Off-site Soil Area 151	MANGANESE	336		759		mg/kg	OFS-151-2	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 151	MERCURY	0.12	J+	1.1	J+	mg/kg	OFS-151-4	10 / 10	-
Off-site Soil Area 151	NICKEL	12		17.7		mg/kg	OFS-151-3	10 / 10	-
Off-site Soil Area 151	POTASSIUM	2330	J+	4010	J+	mg/kg	OFS-151-1	10 / 10	-
Off-site Soil Area 151	SELENIUM	0.71	J	3.1	J	mg/kg	OFS-151-4	4 / 10	3.5 - 3.9
Off-site Soil Area 151	SILVER	0.3	J	1.3		mg/kg	OFS-151-4	10 / 10	-
Off-site Soil Area 151	SODIUM	77.7	J	202	J	mg/kg	OFS-151-4	10 / 10	-
Off-site Soil Area 151	VANADIUM	30.5		46.1		mg/kg	OFS-151-3	10 / 10	-
Off-site Soil Area 151	ZINC	182		794		mg/kg	OFS-151-4	10 / 10	-
Off-site Soil Area 152	ALUMINUM	11500		21400		mg/kg	OFS-152-3	10 / 10	-
Off-site Soil Area 152	ANTIMONY	0.28	J	0.5	J	mg/kg	OFS-152-1	10 / 10	-
Off-site Soil Area 152	ARSENIC	9.6		18.1		mg/kg	OFS-152-2	10 / 10	-
Off-site Soil Area 152	BARIUM	176		519		mg/kg	OFS-152-3	10 / 10	-
Off-site Soil Area 152	BERYLLIUM	0.55		0.67		mg/kg	OFS-152-2	6 / 10	0.43 - 0.52
Off-site Soil Area 152	CADMIUM	0.62		1.2		mg/kg	OFS-152-3	10 / 10	-
Off-site Soil Area 152	CALCIUM	5730		18200		mg/kg	OFS-152-9	10 / 10	-
Off-site Soil Area 152	CHROMIUM	15.2		23.2		mg/kg	OFS-152-3	10 / 10	-
Off-site Soil Area 152	COBALT	9.4		15		mg/kg	OFS-152-3	10 / 10	-
Off-site Soil Area 152	COPPER	34.1		95.2		mg/kg	OFS-152-4	10 / 10	-
Off-site Soil Area 152	IRON	16000		22600		mg/kg	OFS-152-3	10 / 10	-
Off-site Soil Area 152	LEAD	13		37.6		mg/kg	OFS-152-4	10 / 10	-
Off-site Soil Area 152	MAGNESIUM	4810		8640		mg/kg	OFS-152-3	10 / 10	-
Off-site Soil Area 152	MANGANESE	494	J	748		mg/kg	OFS-152-3	10 / 10	-
Off-site Soil Area 152	MERCURY	0.054	J+	0.065	J+	mg/kg	OFS-152-4	2 / 10	0.041 - 0.12
Off-site Soil Area 152	NICKEL	20.5		43.3		mg/kg	OFS-152-3	10 / 10	-
Off-site Soil Area 152	POTASSIUM	2100	J+	3530	J+	mg/kg	OFS-152-5	10 / 10	-
Off-site Soil Area 152	SILVER	0.076	J	0.34	J	mg/kg	OFS-152-4	6 / 10	0.99 - 1
Off-site Soil Area 152	SODIUM	63.1	J	151	J	mg/kg	OFS-152-2	10 / 10	-
Off-site Soil Area 152	VANADIUM	30.9		45.5		mg/kg	OFS-152-3	10 / 10	-
Off-site Soil Area 152	ZINC	58.3		114		mg/kg	OFS-152-4	10 / 10	-
Off-site Soil Area 153	ALUMINUM	8210		12700		mg/kg	OFS-153-3	10 / 10	-
Off-site Soil Area 153	ANTIMONY	0.28	J	2	J	mg/kg	OFS-153-2	10 / 10	-
Off-site Soil Area 153	ARSENIC	7.1		57.6		mg/kg	OFS-153-4	10 / 10	-
Off-site Soil Area 153	BARIUM	130		284		mg/kg	OFS-153-2	10 / 10	-
Off-site Soil Area 153	BERYLLIUM	0.5		0.57		mg/kg	OFS-153-3	2 / 10	0.34 - 0.5
Off-site Soil Area 153	CADMIUM	0.43	J	2.6		mg/kg	OFS-153-4	10 / 10	-
Off-site Soil Area 153	CALCIUM	5200		37700		mg/kg	OFS-153-6	10 / 10	-
Off-site Soil Area 153	CHROMIUM	15		22.4		mg/kg	OFS-153-2	10 / 10	-
Off-site Soil Area 153	COBALT	7.3		13.7		mg/kg	OFS-153-9	10 / 10	-
Off-site Soil Area 153	COPPER	18.9		238		mg/kg	OFS-153-4	10 / 10	-
Off-site Soil Area 153	IRON	14100		23600		mg/kg	OFS-153-9	10 / 10	-
Off-site Soil Area 153	LEAD	8.8		1020		mg/kg	OFS-153-4	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 153	MAGNESIUM	3910		6370		mg/kg	OFS-153-6	10 / 10	-
Off-site Soil Area 153	MANGANESE	370	J	733	J	mg/kg	OFS-153-9	10 / 10	-
Off-site Soil Area 153	MERCURY	0.13	J+	0.44	J+	mg/kg	OFS-153-1	6 / 10	0.098 - 0.1
Off-site Soil Area 153	NICKEL	12		20.5		mg/kg	OFS-153-6	10 / 10	-
Off-site Soil Area 153	POTASSIUM	1930	J+	4200	J+	mg/kg	OFS-153-2	10 / 10	-
Off-site Soil Area 153	SELENIUM	0.89	J	0.89	J	mg/kg	OFS-153-4	1 / 10	3.4 - 3.6
Off-site Soil Area 153	SILVER	0.15	J	2.3		mg/kg	OFS-153-2	8 / 10	0.98 - 1
Off-site Soil Area 153	SODIUM	82.9	J	124	J	mg/kg	OFS-153-1	10 / 10	-
Off-site Soil Area 153	VANADIUM	26.8		50.2		mg/kg	OFS-153-9	10 / 10	-
Off-site Soil Area 153	ZINC	39.3		6780		mg/kg	OFS-153-4	10 / 10	-
Off-site Soil Area 154	ALUMINUM	10100		20400		mg/kg	OFS-154-5	10 / 10	-
Off-site Soil Area 154	ANTIMONY	0.43	J	0.99	J	mg/kg	OFS-154-9	10 / 10	-
Off-site Soil Area 154	ARSENIC	7.8		81.7		mg/kg	OFS-154-3	10 / 10	-
Off-site Soil Area 154	BARIUM	101		171		mg/kg	OFS-154-5	10 / 10	-
Off-site Soil Area 154	BERYLLIUM	0.32	J	0.46	J	mg/kg	OFS-154-5	6 / 10	0.37 - 0.41
Off-site Soil Area 154	CADMIUM	0.56		1.7		mg/kg	OFS-154-9	10 / 10	-
Off-site Soil Area 154	CALCIUM	2690		29700		mg/kg	OFS-154-1	10 / 10	-
Off-site Soil Area 154	CHROMIUM	10.4		18.5		mg/kg	OFS-154-5	10 / 10	-
Off-site Soil Area 154	COBALT	7.4		14.3		mg/kg	OFS-154-2	10 / 10	-
Off-site Soil Area 154	COPPER	19.9		54.4	J	mg/kg	OFS-154-4	10 / 10	-
Off-site Soil Area 154	IRON	17300		30900		mg/kg	OFS-154-5	10 / 10	-
Off-site Soil Area 154	LEAD	7.6		126		mg/kg	OFS-154-9	10 / 10	-
Off-site Soil Area 154	MAGNESIUM	4580		8120		mg/kg	OFS-154-2	10 / 10	-
Off-site Soil Area 154	MANGANESE	319	J	790	J	mg/kg	OFS-154-2	10 / 10	-
Off-site Soil Area 154	MERCURY	0.076	J	0.43	J+	mg/kg	OFS-154-3	8 / 10	0.043 - 0.1
Off-site Soil Area 154	NICKEL	11		16.2		mg/kg	OFS-154-5	10 / 10	-
Off-site Soil Area 154	POTASSIUM	1670	J+	3540	J+	mg/kg	OFS-154-9	10 / 10	-
Off-site Soil Area 154	SILVER	0.11	J	0.53	J	mg/kg	OFS-154-9	6 / 10	0.98 - 1
Off-site Soil Area 154	SODIUM	58.9	J	95.3	J	mg/kg	OFS-154-1	10 / 10	-
Off-site Soil Area 154	VANADIUM	33.2		51.8		mg/kg	OFS-154-5	10 / 10	-
Off-site Soil Area 154	ZINC	44.2		296		mg/kg	OFS-154-9	10 / 10	-
Off-site Soil Area 155	ALUMINUM	14600		20700		mg/kg	OFS-155-2	10 / 10	-
Off-site Soil Area 155	ANTIMONY	0.56	J	2.1	J	mg/kg	OFS-155-8	10 / 10	-
Off-site Soil Area 155	ARSENIC	21.4		84.9		mg/kg	OFS-155-8	10 / 10	-
Off-site Soil Area 155	BARIUM	173		352		mg/kg	OFS-155-1	10 / 10	-
Off-site Soil Area 155	BERYLLIUM	0.54		0.77		mg/kg	OFS-155-8	8 / 10	0.5 - 0.55
Off-site Soil Area 155	CADMIUM	1.3		2		mg/kg	OFS-155-1	10 / 10	-
Off-site Soil Area 155	CALCIUM	7540		38200		mg/kg	OFS-155-4	10 / 10	-
Off-site Soil Area 155	CHROMIUM	24.2		39.6		mg/kg	OFS-155-3	10 / 10	-
Off-site Soil Area 155	COBALT	11.6		16.5		mg/kg	OFS-155-1	10 / 10	-
Off-site Soil Area 155	COPPER	115	J	219	J	mg/kg	OFS-155-1	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 155	CYANIDE	0.17	J	6.1		mg/kg	OFS-155-7	6 / 10	0.26 - 2.8
Off-site Soil Area 155	IRON	21900		26100		mg/kg	OFS-155-2	10 / 10	-
Off-site Soil Area 155	LEAD	30.5		50.4		mg/kg	OFS-155-7	10 / 10	-
Off-site Soil Area 155	MAGNESIUM	5450		7240		mg/kg	OFS-155-2	10 / 10	-
Off-site Soil Area 155	MANGANESE	790		1560		mg/kg	OFS-155-4	10 / 10	-
Off-site Soil Area 155	MERCURY	0.054	J	0.093	J	mg/kg	OFS-155-1	9 / 10	0.05 - 0.05
Off-site Soil Area 155	NICKEL	26.8		59.2		mg/kg	OFS-155-1	10 / 10	-
Off-site Soil Area 155	POTASSIUM	3150	J+	5240	J+	mg/kg	OFS-155-7	10 / 10	-
Off-site Soil Area 155	SILVER	0.2	J	0.5	J	mg/kg	OFS-155-1	10 / 10	-
Off-site Soil Area 155	SODIUM	88.2	J	804		mg/kg	OFS-155-8	10 / 10	-
Off-site Soil Area 155	VANADIUM	42		53.1		mg/kg	OFS-155-5	10 / 10	-
Off-site Soil Area 155	ZINC	91.9		376		mg/kg	OFS-155-8	10 / 10	-
Off-site Soil Area 156	ALUMINUM	12000		19900		mg/kg	OFS-156-5	10 / 10	-
Off-site Soil Area 156	ANTIMONY	0.49	J	1.4	J	mg/kg	OFS-156-9	10 / 10	-
Off-site Soil Area 156	ARSENIC	13.1		177		mg/kg	OFS-156-9	10 / 10	-
Off-site Soil Area 156	BARIUM	101		198		mg/kg	OFS-156-3	10 / 10	-
Off-site Soil Area 156	BERYLLIUM	0.26	J	0.41	J	mg/kg	OFS-156-7	3 / 10	0.37 - 0.5
Off-site Soil Area 156	CADMIUM	0.45	J	1.5	J	mg/kg	OFS-156-9	10 / 10	-
Off-site Soil Area 156	CALCIUM	6150		19500		mg/kg	OFS-156-2	10 / 10	-
Off-site Soil Area 156	CHROMIUM	13.8		151		mg/kg	OFS-156-9	10 / 10	-
Off-site Soil Area 156	COBALT	9.5		23.8		mg/kg	OFS-156-9	10 / 10	-
Off-site Soil Area 156	COPPER	26.4		92.7		mg/kg	OFS-156-9	10 / 10	-
Off-site Soil Area 156	IRON	18200		46600		mg/kg	OFS-156-9	10 / 10	-
Off-site Soil Area 156	LEAD	7.8	J	32	J	mg/kg	OFS-156-3	10 / 10	-
Off-site Soil Area 156	MAGNESIUM	5450		12100		mg/kg	OFS-156-9	10 / 10	-
Off-site Soil Area 156	MANGANESE	606		1650		mg/kg	OFS-156-9	10 / 10	-
Off-site Soil Area 156	MERCURY	0.052	J	0.16		mg/kg	OFS-156-3	4 / 10	0.1 - 0.11
Off-site Soil Area 156	NICKEL	13.4		104		mg/kg	OFS-156-9	10 / 10	-
Off-site Soil Area 156	POTASSIUM	988	J+	2320	J+	mg/kg	OFS-156-1	10 / 10	-
Off-site Soil Area 156	SILVER	0.12	J	0.19	J	mg/kg	OFS-156-3	3 / 10	0.99 - 1.1
Off-site Soil Area 156	SODIUM	49.9	J	188	J	mg/kg	OFS-156-7	10 / 10	-
Off-site Soil Area 156	VANADIUM	33.5		104		mg/kg	OFS-156-9	10 / 10	-
Off-site Soil Area 156	ZINC	42.9		128		mg/kg	OFS-156-3	10 / 10	-
Off-site Soil Area 157	ALUMINUM	5150		13400		mg/kg	OFS-157-1	10 / 10	-
Off-site Soil Area 157	ANTIMONY	0.37	J	5	J	mg/kg	OFS-157-1	10 / 10	-
Off-site Soil Area 157	ARSENIC	4.7		538		mg/kg	OFS-157-2	10 / 10	-
Off-site Soil Area 157	BARIUM	49.1		132		mg/kg	OFS-157-1	10 / 10	-
Off-site Soil Area 157	BERYLLIUM	0.13	J	0.42	J	mg/kg	OFS-157-8	10 / 10	-
Off-site Soil Area 157	CADMIUM	0.22	J	3.4	J	mg/kg	OFS-157-1	8 / 10	0.5 - 0.53
Off-site Soil Area 157	CALCIUM	4510		9470		mg/kg	OFS-157-1	10 / 10	-
Off-site Soil Area 157	CHROMIUM	7.1		24.2		mg/kg	OFS-157-8	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 157	COBALT	4.9		13.3		mg/kg	OFS-157-2	10 / 10	-
Off-site Soil Area 157	COPPER	13.7		440		mg/kg	OFS-157-1	10 / 10	-
Off-site Soil Area 157	IRON	9940		26600		mg/kg	OFS-157-1	10 / 10	-
Off-site Soil Area 157	LEAD	5.2	J	208	J	mg/kg	OFS-157-1	10 / 10	-
Off-site Soil Area 157	MAGNESIUM	3330		7000		mg/kg	OFS-157-1	10 / 10	-
Off-site Soil Area 157	MANGANESE	202		815		mg/kg	OFS-157-1	10 / 10	-
Off-site Soil Area 157	MERCURY	0.056	J	0.25		mg/kg	OFS-157-2	4 / 10	0.097 - 0.1
Off-site Soil Area 157	NICKEL	6.7		23.2		mg/kg	OFS-157-8	10 / 10	-
Off-site Soil Area 157	POTASSIUM	945	J+	2520	J+	mg/kg	OFS-157-8	10 / 10	-
Off-site Soil Area 157	SELENIUM	0.95	J-	0.95	J-	mg/kg	OFS-157-2	1 / 10	3.4 - 3.7
Off-site Soil Area 157	SILVER	0.11	J	2.6		mg/kg	OFS-157-1	4 / 10	0.96 - 1.1
Off-site Soil Area 157	SODIUM	125	J	233	J	mg/kg	OFS-157-4	10 / 10	-
Off-site Soil Area 157	VANADIUM	18.1		50.3		mg/kg	OFS-157-1	10 / 10	-
Off-site Soil Area 157	ZINC	24.9		508		mg/kg	OFS-157-2	10 / 10	-
Off-site Soil Area 158	ALUMINUM	18300		24100		mg/kg	OFS-158-7	10 / 10	-
Off-site Soil Area 158	ANTIMONY	0.62	J	0.99	J	mg/kg	OFS-158-9	10 / 10	-
Off-site Soil Area 158	ARSENIC	13.5		39.3		mg/kg	OFS-158-9	10 / 10	-
Off-site Soil Area 158	BARIUM	131		173		mg/kg	OFS-158-7	10 / 10	-
Off-site Soil Area 158	BERYLLIUM	0.56		0.77		mg/kg	OFS-158-7	10 / 10	-
Off-site Soil Area 158	CADMIUM	0.015	J	0.44	J	mg/kg	OFS-158-9	5 / 10	0.49 - 0.55
Off-site Soil Area 158	CALCIUM	6280		14000		mg/kg	OFS-158-2	10 / 10	-
Off-site Soil Area 158	CHROMIUM	14.6		18.6		mg/kg	OFS-158-8	10 / 10	-
Off-site Soil Area 158	COBALT	13.4		20.4		mg/kg	OFS-158-9	10 / 10	-
Off-site Soil Area 158	COPPER	36.8		47.2		mg/kg	OFS-158-9	10 / 10	-
Off-site Soil Area 158	IRON	28800		35900		mg/kg	OFS-158-5	10 / 10	-
Off-site Soil Area 158	LEAD	7.9		34.9		mg/kg	OFS-158-9	10 / 10	-
Off-site Soil Area 158	MAGNESIUM	7830		9180		mg/kg	OFS-158-8	10 / 10	-
Off-site Soil Area 158	MANGANESE	724		916		mg/kg	OFS-158-9	10 / 10	-
Off-site Soil Area 158	MERCURY	0.043	J	0.056	J	mg/kg	OFS-158-4	5 / 10	0.099 - 0.11
Off-site Soil Area 158	NICKEL	14.5		17.7		mg/kg	OFS-158-8	10 / 10	-
Off-site Soil Area 158	POTASSIUM	1550	J+	2230	J+	mg/kg	OFS-158-8	10 / 10	-
Off-site Soil Area 158	SILVER	0.12	J-	0.12	J-	mg/kg	OFS-158-9	1 / 10	0.99 - 1.1
Off-site Soil Area 158	SODIUM	131	J	530		mg/kg	OFS-158-7	10 / 10	-
Off-site Soil Area 158	VANADIUM	51.6		66.4		mg/kg	OFS-158-5	10 / 10	-
Off-site Soil Area 158	ZINC	54.7	J	218	J	mg/kg	OFS-158-9	10 / 10	-
Off-site Soil Area 159	ALUMINUM	10700		20000		mg/kg	OFS-159-1	10 / 10	-
Off-site Soil Area 159	ANTIMONY	0.67	J	0.89	J	mg/kg	OFS-159-1	7 / 10	6 - 6.1
Off-site Soil Area 159	ARSENIC	11.3		35.4		mg/kg	OFS-159-1	10 / 10	-
Off-site Soil Area 159	BARIUM	59.1		184		mg/kg	OFS-159-3	10 / 10	-
Off-site Soil Area 159	BERYLLIUM	0.28	J	0.58		mg/kg	OFS-159-1	8 / 10	0.22 - 0.29
Off-site Soil Area 159	CADMIUM	0.17	J	1.1		mg/kg	OFS-159-8	4 / 10	0.48 - 0.53

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 159	CALCIUM	5200		11700		mg/kg	OFS-159-7	10 / 10	-
Off-site Soil Area 159	CHROMIUM	9.5		19.1		mg/kg	OFS-159-9	10 / 10	-
Off-site Soil Area 159	COBALT	11.6		18.8		mg/kg	OFS-159-3	10 / 10	-
Off-site Soil Area 159	COPPER	31.6		53.2		mg/kg	OFS-159-5	10 / 10	-
Off-site Soil Area 159	IRON	21500		34300		mg/kg	OFS-159-1	10 / 10	-
Off-site Soil Area 159	LEAD	10.2		28.6		mg/kg	OFS-159-8	10 / 10	-
Off-site Soil Area 159	MAGNESIUM	6120		10100		mg/kg	OFS-159-1	10 / 10	-
Off-site Soil Area 159	MANGANESE	529		1130		mg/kg	OFS-159-3	10 / 10	-
Off-site Soil Area 159	MERCURY	0.045	J	0.16		mg/kg	OFS-159-1	8 / 10	0.097 - 0.099
Off-site Soil Area 159	NICKEL	8.1		20.1		mg/kg	OFS-159-1	10 / 10	-
Off-site Soil Area 159	POTASSIUM	567	J+	2570	J	mg/kg	OFS-159-8	10 / 10	-
Off-site Soil Area 159	SELENIUM	0.57	J	0.75	J	mg/kg	OFS-159-8	3 / 10	3.4 - 3.7
Off-site Soil Area 159	SILVER	0.1	J-	0.1	J-	mg/kg	OFS-159-1	0 / 10	0.97 - 1.1
Off-site Soil Area 159	SODIUM	62.1	J	182	J	mg/kg	OFS-159-1	8 / 10	70.8 - 90
Off-site Soil Area 159	THALLIUM	1.1	J	1.5	J	mg/kg	OFS-159-8	4 / 10	2.4 - 2.6
Off-site Soil Area 159	VANADIUM	40.8		64.4		mg/kg	OFS-159-1	10 / 10	-
Off-site Soil Area 159	ZINC	64.6		150	J	mg/kg	OFS-159-1	10 / 10	-
Off-site Soil Area 160	ALUMINUM	7440		13700		mg/kg	OFS-160-9	10 / 10	-
Off-site Soil Area 160	ANTIMONY	0.69	J	0.96	J	mg/kg	OFS-160-3	7 / 10	5.9 - 6.1
Off-site Soil Area 160	ARSENIC	21.6		36.5		mg/kg	OFS-160-4	10 / 10	-
Off-site Soil Area 160	BARIUM	180		912		mg/kg	OFS-160-3	10 / 10	-
Off-site Soil Area 160	BERYLLIUM	0.35	J	0.35	J	mg/kg	OFS-160-1	1 / 10	0.19 - 0.53
Off-site Soil Area 160	CADMIUM	1.5		2.9		mg/kg	OFS-160-4	10 / 10	-
Off-site Soil Area 160	CALCIUM	2170		11600		mg/kg	OFS-160-5	10 / 10	-
Off-site Soil Area 160	CHROMIUM	19.1		39.8		mg/kg	OFS-160-8	10 / 10	-
Off-site Soil Area 160	COBALT	8.9		17.4		mg/kg	OFS-160-1	10 / 10	-
Off-site Soil Area 160	COPPER	62.8		179		mg/kg	OFS-160-4	10 / 10	-
Off-site Soil Area 160	CYANIDE	0.21	J	1.3	J	mg/kg	OFS-160-3	8 / 10	2.5 - 2.8
Off-site Soil Area 160	IRON	21000		38500		mg/kg	OFS-160-8	10 / 10	-
Off-site Soil Area 160	LEAD	27.2		147		mg/kg	OFS-160-4	10 / 10	-
Off-site Soil Area 160	MAGNESIUM	5120		7430		mg/kg	OFS-160-8	10 / 10	-
Off-site Soil Area 160	MANGANESE	2160		5990		mg/kg	OFS-160-1	10 / 10	-
Off-site Soil Area 160	MERCURY	0.055	J	0.13		mg/kg	OFS-160-4	7 / 10	0.041 - 0.1
Off-site Soil Area 160	NICKEL	18.1		31.9		mg/kg	OFS-160-1	10 / 10	-
Off-site Soil Area 160	POTASSIUM	2570	J	4680	J	mg/kg	OFS-160-8	10 / 10	-
Off-site Soil Area 160	SELENIUM	0.47	J	1.2	J	mg/kg	OFS-160-4	9 / 10	3.5 - 3.5
Off-site Soil Area 160	SILVER	0.26	J-	0.39	J-	mg/kg	OFS-160-4	5 / 10	0.15 - 0.42
Off-site Soil Area 160	SODIUM	103	J	103	J	mg/kg	OFS-160-1	1 / 10	62.9 - 354
Off-site Soil Area 160	THALLIUM	1.2	J	3		mg/kg	OFS-160-3	10 / 10	-
Off-site Soil Area 160	VANADIUM	43.3		77.5		mg/kg	OFS-160-8	10 / 10	-
Off-site Soil Area 160	ZINC	76.7		309		mg/kg	OFS-160-4	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 161	ALUMINUM	9640		18500		mg/kg	OFS-161-1	10 / 10	-
Off-site Soil Area 161	ANTIMONY	0.67	J	0.98	J	mg/kg	OFS-161-2	7 / 10	5.8 - 6.2
Off-site Soil Area 161	ARSENIC	9		24.2		mg/kg	OFS-161-1	10 / 10	-
Off-site Soil Area 161	BARIUM	115		275		mg/kg	OFS-161-4	10 / 10	-
Off-site Soil Area 161	BERYLLIUM	0.5		0.58		mg/kg	OFS-161-1	3 / 10	0.21 - 0.5
Off-site Soil Area 161	CADMIUM	0.8		1.7		mg/kg	OFS-161-1	10 / 10	-
Off-site Soil Area 161	CADMIUM	0.8		1.7	J	mg/kg	OFS-161-7	10 / 10	-
Off-site Soil Area 161	CALCIUM	4070		10900		mg/kg	OFS-161-3	10 / 10	-
Off-site Soil Area 161	CHROMIUM	12.9		25.1		mg/kg	OFS-161-1	10 / 10	-
Off-site Soil Area 161	COBALT	6.8		17.2		mg/kg	OFS-161-1	10 / 10	-
Off-site Soil Area 161	COPPER	34.7		105		mg/kg	OFS-161-1	10 / 10	-
Off-site Soil Area 161	IRON	15000		23700		mg/kg	OFS-161-1	10 / 10	-
Off-site Soil Area 161	LEAD	11.3		50.2		mg/kg	OFS-161-5	10 / 10	-
Off-site Soil Area 161	MAGNESIUM	4460		7090		mg/kg	OFS-161-1	10 / 10	-
Off-site Soil Area 161	MANGANESE	617		1420	J	mg/kg	OFS-161-6	10 / 10	-
Off-site Soil Area 161	MERCURY	0.043	J	0.18		mg/kg	OFS-161-6	9 / 10	0.11 - 0.11
Off-site Soil Area 161	NICKEL	13.9		34.9		mg/kg	OFS-161-1	10 / 10	-
Off-site Soil Area 161	POTASSIUM	1920	J	4750	J	mg/kg	OFS-161-7	10 / 10	-
Off-site Soil Area 161	SELENIUM	0.42	J	0.88	J	mg/kg	OFS-161-1	4 / 10	0.49 - 1.2
Off-site Soil Area 161	SILVER	0.078	J-	0.24	J-	mg/kg	OFS-161-5	4 / 10	0.072 - 1
Off-site Soil Area 161	SODIUM	49.2	J	158	J	mg/kg	OFS-161-7	6 / 10	70.3 - 93.9
Off-site Soil Area 161	THALLIUM	0.49	J	2.2	J	mg/kg	OFS-161-4	10 / 10	-
Off-site Soil Area 161	VANADIUM	27.1		42.1		mg/kg	OFS-161-1	10 / 10	-
Off-site Soil Area 161	ZINC	50.5		220	J-	mg/kg	OFS-161-7	10 / 10	-
Off-site Soil Area 162	ALUMINUM	11000		16900		mg/kg	OFS-162-3	10 / 10	-
Off-site Soil Area 162	ANTIMONY	0.67	J	1.4	J	mg/kg	OFS-162-5	7 / 10	6 - 6.2
Off-site Soil Area 162	ARSENIC	6.4		176		mg/kg	OFS-162-5	10 / 10	-
Off-site Soil Area 162	BARIUM	104		198		mg/kg	OFS-162-8	10 / 10	-
Off-site Soil Area 162	CADMIUM	0.86	J	3.4	J	mg/kg	OFS-162-5	10 / 10	-
Off-site Soil Area 162	CALCIUM	3710		15400		mg/kg	OFS-162-1	10 / 10	-
Off-site Soil Area 162	CHROMIUM	14.2		70.6		mg/kg	OFS-162-3	10 / 10	-
Off-site Soil Area 162	COBALT	6.2		21.6		mg/kg	OFS-162-3	10 / 10	-
Off-site Soil Area 162	COPPER	23.3		640		mg/kg	OFS-162-5	10 / 10	-
Off-site Soil Area 162	IRON	15700		28200		mg/kg	OFS-162-3	10 / 10	-
Off-site Soil Area 162	LEAD	7.1		1350		mg/kg	OFS-162-5	10 / 10	-
Off-site Soil Area 162	MAGNESIUM	3840		11100		mg/kg	OFS-162-3	10 / 10	-
Off-site Soil Area 162	MANGANESE	475	J	1220	J	mg/kg	OFS-162-3	10 / 10	-
Off-site Soil Area 162	MERCURY	0.053	J	0.8		mg/kg	OFS-162-5	5 / 10	0.099 - 0.11
Off-site Soil Area 162	NICKEL	11.4		47.5		mg/kg	OFS-162-3	10 / 10	-
Off-site Soil Area 162	POTASSIUM	1390	J	3600	J	mg/kg	OFS-162-6	10 / 10	-
Off-site Soil Area 162	SELENIUM	0.55	J-	0.55	J-	mg/kg	OFS-162-1	1 / 10	0.39 - 3.5

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 162	SILVER	0.063	J-	2.2	J-	mg/kg	OFS-162-5	5 / 10	1 - 1.1
Off-site Soil Area 162	SODIUM	63.8	J	246	J	mg/kg	OFS-162-2	10 / 10	-
Off-site Soil Area 162	THALLIUM	0.89	J	2.8		mg/kg	OFS-162-3	10 / 10	-
Off-site Soil Area 162	VANADIUM	28.2		65.3		mg/kg	OFS-162-3	10 / 10	-
Off-site Soil Area 162	ZINC	44	J-	487	J-	mg/kg	OFS-162-5	10 / 10	-
Off-site Soil Area 163	ALUMINUM	8030		15100		mg/kg	OFS-163-8	10 / 10	-
Off-site Soil Area 163	ANTIMONY	0.73	J	1.4	J	mg/kg	OFS-163-6	9 / 10	6 - 6.1
Off-site Soil Area 163	ARSENIC	12.6		35.5		mg/kg	OFS-163-3	10 / 10	-
Off-site Soil Area 163	BARIUM	153		276		mg/kg	OFS-163-3	10 / 10	-
Off-site Soil Area 163	BERYLLIUM	0.52		0.61		mg/kg	OFS-163-2	4 / 10	0.26 - 0.5
Off-site Soil Area 163	CADMIUM	0.98		3		mg/kg	OFS-163-3	10 / 10	-
Off-site Soil Area 163	CALCIUM	4640		14600		mg/kg	OFS-163-9	10 / 10	-
Off-site Soil Area 163	CHROMIUM	15.3		29.8		mg/kg	OFS-163-3	10 / 10	-
Off-site Soil Area 163	COBALT	8.4		13.3		mg/kg	OFS-163-8	10 / 10	-
Off-site Soil Area 163	COPPER	53.9		233		mg/kg	OFS-163-6	10 / 10	-
Off-site Soil Area 163	IRON	17200		26000		mg/kg	OFS-163-3	10 / 10	-
Off-site Soil Area 163	LEAD	19.3	J	373	J	mg/kg	OFS-163-3	10 / 10	-
Off-site Soil Area 163	MAGNESIUM	4100		7780		mg/kg	OFS-163-8	10 / 10	-
Off-site Soil Area 163	MANGANESE	888		1630		mg/kg	OFS-163-3	10 / 10	-
Off-site Soil Area 163	MERCURY	0.045	J	0.22		mg/kg	OFS-163-3	9 / 10	0.1 - 0.1
Off-site Soil Area 163	NICKEL	16.9		30.6		mg/kg	OFS-163-4	10 / 10	-
Off-site Soil Area 163	POTASSIUM	2520		4860		mg/kg	OFS-163-8	10 / 10	-
Off-site Soil Area 163	SELENIUM	0.45	J	0.45	J	mg/kg	OFS-163-3	1 / 10	0.43 - 3.6
Off-site Soil Area 163	SILVER	0.082	J-	0.62	J	mg/kg	OFS-163-3	6 / 10	1 - 1
Off-site Soil Area 163	SODIUM	61.1	J	128	J	mg/kg	OFS-163-9	10 / 10	-
Off-site Soil Area 163	THALLIUM	0.81	J	2.8		mg/kg	OFS-163-8	3 / 10	0.74 - 2.6
Off-site Soil Area 163	VANADIUM	31.9		50		mg/kg	OFS-163-4	10 / 10	-
Off-site Soil Area 163	ZINC	87.1		396		mg/kg	OFS-163-3	10 / 10	-
Off-site Soil Area 164	ALUMINUM	10600		14200		mg/kg	OFS-164-8	10 / 10	-
Off-site Soil Area 164	ANTIMONY	0.83	J	29.1	J	mg/kg	OFS-164-1	10 / 10	-
Off-site Soil Area 164	ARSENIC	14.9		191		mg/kg	OFS-164-8	10 / 10	-
Off-site Soil Area 164	BARIUM	129		225		mg/kg	OFS-164-8	10 / 10	-
Off-site Soil Area 164	BERYLLIUM	0.5	J	0.66		mg/kg	OFS-164-3	7 / 10	0.42 - 0.51
Off-site Soil Area 164	CADMIUM	0.81		13.1		mg/kg	OFS-164-9	10 / 10	-
Off-site Soil Area 164	CALCIUM	3640		8340		mg/kg	OFS-164-1	10 / 10	-
Off-site Soil Area 164	CHROMIUM	11.1		29.7		mg/kg	OFS-164-8	10 / 10	-
Off-site Soil Area 164	COBALT	7.6		10.8		mg/kg	OFS-164-8	10 / 10	-
Off-site Soil Area 164	COPPER	34.6		169		mg/kg	OFS-164-9	10 / 10	-
Off-site Soil Area 164	IRON	19000		33500		mg/kg	OFS-164-8	10 / 10	-
Off-site Soil Area 164	LEAD	52.7	J	1120	J	mg/kg	OFS-164-1	10 / 10	-
Off-site Soil Area 164	MAGNESIUM	4770		6300		mg/kg	OFS-164-8	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 164	MANGANESE	420		694		mg/kg	OFS-164-5	10 / 10	-
Off-site Soil Area 164	MERCURY	0.1	J	2		mg/kg	OFS-164-8	10 / 10	-
Off-site Soil Area 164	NICKEL	11.5		22.3		mg/kg	OFS-164-8	10 / 10	-
Off-site Soil Area 164	POTASSIUM	1440		4110		mg/kg	OFS-164-8	10 / 10	-
Off-site Soil Area 164	SELENIUM	0.47	J	4.2	J	mg/kg	OFS-164-6	7 / 10	3.5 - 3.8
Off-site Soil Area 164	SILVER	0.1	J	2.4		mg/kg	OFS-164-8	9 / 10	1 - 1
Off-site Soil Area 164	SODIUM	62	J	158	J	mg/kg	OFS-164-9	10 / 10	-
Off-site Soil Area 164	VANADIUM	28.9		54.5		mg/kg	OFS-164-8	10 / 10	-
Off-site Soil Area 164	ZINC	120		3700		mg/kg	OFS-164-9	10 / 10	-
Off-site Soil Area 165	ALUMINUM	8830		13800		mg/kg	OFS-165-1	10 / 10	-
Off-site Soil Area 165	ANTIMONY	0.72	J	1.2	J	mg/kg	OFS-165-1	10 / 10	-
Off-site Soil Area 165	ARSENIC	14.6		44.1		mg/kg	OFS-165-3	10 / 10	-
Off-site Soil Area 165	BARIUM	136		358		mg/kg	OFS-165-2	10 / 10	-
Off-site Soil Area 165	BERYLLIUM	0.36	J	0.67		mg/kg	OFS-165-3	4 / 10	0.39 - 0.53
Off-site Soil Area 165	CADMIUM	0.82		3.2		mg/kg	OFS-165-2	10 / 10	-
Off-site Soil Area 165	CALCIUM	4660		18400		mg/kg	OFS-165-5	10 / 10	-
Off-site Soil Area 165	CHROMIUM	16.4		26.7		mg/kg	OFS-165-3	10 / 10	-
Off-site Soil Area 165	COBALT	8.4		12.7		mg/kg	OFS-165-1	10 / 10	-
Off-site Soil Area 165	COPPER	59.9	J	229	J	mg/kg	OFS-165-1	10 / 10	-
Off-site Soil Area 165	IRON	16800		25400		mg/kg	OFS-165-2	10 / 10	-
Off-site Soil Area 165	LEAD	30.5		213		mg/kg	OFS-165-2	10 / 10	-
Off-site Soil Area 165	MAGNESIUM	4240		6880		mg/kg	OFS-165-1	10 / 10	-
Off-site Soil Area 165	MANGANESE	706		1350		mg/kg	OFS-165-4	10 / 10	-
Off-site Soil Area 165	MERCURY	0.1	J	42.1		mg/kg	OFS-165-6	10 / 10	-
Off-site Soil Area 165	NICKEL	16.9		25.7		mg/kg	OFS-165-3	10 / 10	-
Off-site Soil Area 165	POTASSIUM	3370		4980		mg/kg	OFS-165-3	10 / 10	-
Off-site Soil Area 165	SELENIUM	0.48	J-	2.6	J-	mg/kg	OFS-165-4	8 / 10	3.6 - 3.8
Off-site Soil Area 165	SILVER	0.097	J	1.2	J	mg/kg	OFS-165-8	10 / 10	-
Off-site Soil Area 165	SODIUM	80.5	J	268	J	mg/kg	OFS-165-5	10 / 10	-
Off-site Soil Area 165	VANADIUM	28.5		42.6		mg/kg	OFS-165-3	10 / 10	-
Off-site Soil Area 165	ZINC	112		878		mg/kg	OFS-165-2	10 / 10	-
Off-site Soil Area 166	ALUMINUM	12700		23200		mg/kg	OFS-166-4	10 / 10	-
Off-site Soil Area 166	ANTIMONY	0.59	J	0.77	J	mg/kg	OFS-166-3	10 / 10	-
Off-site Soil Area 166	ARSENIC	14.2	J	43.5	J	mg/kg	OFS-166-3	10 / 10	-
Off-site Soil Area 166	BARIUM	122		260		mg/kg	OFS-166-4	10 / 10	-
Off-site Soil Area 166	BERYLLIUM	0.35	J	0.78		mg/kg	OFS-166-4	10 / 10	-
Off-site Soil Area 166	CADMIUM	0.086	J	0.63		mg/kg	OFS-166-9	9 / 10	0.55 - 0.55
Off-site Soil Area 166	CALCIUM	3950		7650		mg/kg	OFS-166-3	10 / 10	-
Off-site Soil Area 166	CHROMIUM	12.2		22		mg/kg	OFS-166-9	10 / 10	-
Off-site Soil Area 166	COBALT	10.1		14.6		mg/kg	OFS-166-3	10 / 10	-
Off-site Soil Area 166	COPPER	29.5		51.2		mg/kg	OFS-166-9	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 166	IRON	23500		31900		mg/kg	OFS-166-4	10 / 10	-
Off-site Soil Area 166	LEAD	7.7	J	36.3	J	mg/kg	OFS-166-3	10 / 10	-
Off-site Soil Area 166	MAGNESIUM	4940		8380		mg/kg	OFS-166-3	10 / 10	-
Off-site Soil Area 166	MANGANESE	469		767		mg/kg	OFS-166-4	10 / 10	-
Off-site Soil Area 166	MERCURY	0.053	J	0.15		mg/kg	OFS-166-3	5 / 10	0.098 - 0.11
Off-site Soil Area 166	NICKEL	12.3		19.1		mg/kg	OFS-166-1	10 / 10	-
Off-site Soil Area 166	POTASSIUM	1010	J+	3940	J+	mg/kg	OFS-166-8	10 / 10	-
Off-site Soil Area 166	SILVER	0.12	J	0.21	J	mg/kg	OFS-166-9	4 / 10	1 - 1.1
Off-site Soil Area 166	SODIUM	109	J	166	J	mg/kg	OFS-166-3	10 / 10	-
Off-site Soil Area 166	VANADIUM	37.2		49.2		mg/kg	OFS-166-3	10 / 10	-
Off-site Soil Area 166	ZINC	42.7		153		mg/kg	OFS-166-3	10 / 10	-
Off-site Soil Area 167	ALUMINUM	20500		36600		mg/kg	OFS-167-2	10 / 10	-
Off-site Soil Area 167	ANTIMONY	0.75	J	1.5	J	mg/kg	OFS-167-9	10 / 10	-
Off-site Soil Area 167	ARSENIC	22.1	J	87.2	J	mg/kg	OFS-167-4	10 / 10	-
Off-site Soil Area 167	BARIUM	72.8		1000		mg/kg	OFS-167-2	10 / 10	-
Off-site Soil Area 167	BERYLLIUM	0.29	J	1.2		mg/kg	OFS-167-2	10 / 10	-
Off-site Soil Area 167	CADMIUM	0.33	J	3.7		mg/kg	OFS-167-4	10 / 10	-
Off-site Soil Area 167	CALCIUM	1810		16100		mg/kg	OFS-167-2	10 / 10	-
Off-site Soil Area 167	CHROMIUM	47.5		288		mg/kg	OFS-167-7	10 / 10	-
Off-site Soil Area 167	COBALT	24.3		42.9		mg/kg	OFS-167-8	10 / 10	-
Off-site Soil Area 167	COPPER	74		418		mg/kg	OFS-167-4	10 / 10	-
Off-site Soil Area 167	IRON	29900		65800		mg/kg	OFS-167-9	10 / 10	-
Off-site Soil Area 167	LEAD	11.4	J	166	J	mg/kg	OFS-167-1	10 / 10	-
Off-site Soil Area 167	MAGNESIUM	13800		23500		mg/kg	OFS-167-6	10 / 10	-
Off-site Soil Area 167	MANGANESE	876		1660		mg/kg	OFS-167-5	10 / 10	-
Off-site Soil Area 167	MERCURY	0.045	J	0.14		mg/kg	OFS-167-1	10 / 10	-
Off-site Soil Area 167	NICKEL	47.8		167		mg/kg	OFS-167-2	10 / 10	-
Off-site Soil Area 167	POTASSIUM	1460	J+	5080	J+	mg/kg	OFS-167-5	10 / 10	-
Off-site Soil Area 167	SILVER	0.11	J	1.1		mg/kg	OFS-167-1	10 / 10	-
Off-site Soil Area 167	SODIUM	46.9	J	1350		mg/kg	OFS-167-1	10 / 10	-
Off-site Soil Area 167	VANADIUM	52.5		162		mg/kg	OFS-167-9	10 / 10	-
Off-site Soil Area 167	ZINC	59.1		388		mg/kg	OFS-167-4	10 / 10	-
Off-site Soil Area 168	ALUMINUM	7920		14000		mg/kg	OFS-168-7	10 / 10	-
Off-site Soil Area 168	ANTIMONY	0.78	J	1.3	J	mg/kg	OFS-168-8	9 / 10	6.2 - 6.2
Off-site Soil Area 168	ARSENIC	10.3		32.1		mg/kg	OFS-168-3	10 / 10	-
Off-site Soil Area 168	BARIUM	73.1		212		mg/kg	OFS-168-1	10 / 10	-
Off-site Soil Area 168	BERYLLIUM	0.15	J	0.62		mg/kg	OFS-168-1	10 / 10	-
Off-site Soil Area 168	CADMIUM	0.48	J	2		mg/kg	OFS-168-1	10 / 10	-
Off-site Soil Area 168	CALCIUM	3940		7430		mg/kg	OFS-168-1	10 / 10	-
Off-site Soil Area 168	CHROMIUM	10.6		41.1		mg/kg	OFS-168-3	10 / 10	-
Off-site Soil Area 168	COBALT	6.3		16.9		mg/kg	OFS-168-3	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 168	COPPER	32.3	J	191	J	mg/kg	OFS-168-1	10 / 10	-
Off-site Soil Area 168	IRON	14300		21300		mg/kg	OFS-168-3	10 / 10	-
Off-site Soil Area 168	LEAD	15.3		262		mg/kg	OFS-168-4	10 / 10	-
Off-site Soil Area 168	MAGNESIUM	3620		8100		mg/kg	OFS-168-3	10 / 10	-
Off-site Soil Area 168	MANGANESE	428		615		mg/kg	OFS-168-1	10 / 10	-
Off-site Soil Area 168	MERCURY	0.044	J	0.24		mg/kg	OFS-168-3	8 / 10	0.1 - 0.1
Off-site Soil Area 168	NICKEL	13.5		34.8		mg/kg	OFS-168-3	10 / 10	-
Off-site Soil Area 168	POTASSIUM	2220		3830		mg/kg	OFS-168-1	10 / 10	-
Off-site Soil Area 168	SELENIUM	0.65	J-	0.65	J-	mg/kg	OFS-168-1	1 / 10	3.5 - 3.8
Off-site Soil Area 168	SILVER	0.067	J	0.61	J	mg/kg	OFS-168-1	7 / 10	1 - 1
Off-site Soil Area 168	SODIUM	51.4	J	93.9	J	mg/kg	OFS-168-8	10 / 10	-
Off-site Soil Area 168	VANADIUM	28.2		48.6		mg/kg	OFS-168-3	10 / 10	-
Off-site Soil Area 168	ZINC	59.6		411		mg/kg	OFS-168-1	10 / 10	-
Off-site Soil Area 169	ALUMINUM	11700		16700		mg/kg	OFS-169-9	10 / 10	-
Off-site Soil Area 169	ANTIMONY	0.73	J	0.8	J	mg/kg	OFS-169-8	2 / 10	6.1 - 6.7
Off-site Soil Area 169	ARSENIC	10.7	J-	25.7	J-	mg/kg	OFS-169-8	10 / 10	-
Off-site Soil Area 169	BARIUM	175		251		mg/kg	OFS-169-7	10 / 10	-
Off-site Soil Area 169	BERYLLIUM	0.24	J	0.54		mg/kg	OFS-169-9	9 / 10	0.27 - 0.27
Off-site Soil Area 169	CADMIUM	0.54		1.6		mg/kg	OFS-169-8	10 / 10	-
Off-site Soil Area 169	CALCIUM	6000		16500		mg/kg	OFS-169-7	10 / 10	-
Off-site Soil Area 169	CHROMIUM	18.4		28.7		mg/kg	OFS-169-8	10 / 10	-
Off-site Soil Area 169	COBALT	9		11		mg/kg	OFS-169-6	10 / 10	-
Off-site Soil Area 169	COPPER	42.8		200		mg/kg	OFS-169-8	10 / 10	-
Off-site Soil Area 169	CYANIDE	0.17	J	0.64	J	mg/kg	OFS-169-8	3 / 10	2.5 - 2.8
Off-site Soil Area 169	IRON	18200		22100		mg/kg	OFS-169-6	10 / 10	-
Off-site Soil Area 169	LEAD	12.1		135		mg/kg	OFS-169-2	10 / 10	-
Off-site Soil Area 169	MAGNESIUM	5170		7090		mg/kg	OFS-169-7	10 / 10	-
Off-site Soil Area 169	MANGANESE	605		1060		mg/kg	OFS-169-8	10 / 10	-
Off-site Soil Area 169	MERCURY	0.052	J	0.68		mg/kg	OFS-169-7	6 / 10	0.1 - 0.1
Off-site Soil Area 169	NICKEL	21.6		32.7		mg/kg	OFS-169-7	10 / 10	-
Off-site Soil Area 169	POTASSIUM	2340		4160		mg/kg	OFS-169-9	10 / 10	-
Off-site Soil Area 169	SELENIUM	1.1	J-	1.1	J-	mg/kg	OFS-169-1	1 / 10	3.5 - 3.9
Off-site Soil Area 169	SILVER	0.079	J	0.29	J	mg/kg	OFS-169-8	3 / 10	1 - 1.1
Off-site Soil Area 169	SODIUM	69	J	302	J	mg/kg	OFS-169-7	10 / 10	-
Off-site Soil Area 169	THALLIUM	2.7		2.7		mg/kg	OFS-169-3	1 / 10	1.1 - 2.6
Off-site Soil Area 169	VANADIUM	32.8		41.9		mg/kg	OFS-169-6	10 / 10	-
Off-site Soil Area 169	ZINC	69.8		200		mg/kg	OFS-169-8	10 / 10	-
Off-site Soil Area 170	ALUMINUM	12800		19800		mg/kg	OFS-170-8	10 / 10	-
Off-site Soil Area 170	ANTIMONY	0.45	J	0.72	J	mg/kg	OFS-170-8	3 / 10	6.1 - 6.5
Off-site Soil Area 170	ARSENIC	12.4		34.1	J-	mg/kg	OFS-170-5	10 / 10	-
Off-site Soil Area 170	BARIUM	98.1		259		mg/kg	OFS-170-2	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 170	BERYLLIUM	0.15	J	0.63		mg/kg	OFS-170-8	10 / 10	-
Off-site Soil Area 170	CADMIUM	0.23	J	1.2		mg/kg	OFS-170-5	9 / 10	0.51 - 0.51
Off-site Soil Area 170	CALCIUM	7480		20600		mg/kg	OFS-170-6	10 / 10	-
Off-site Soil Area 170	CHROMIUM	11.3		33.8		mg/kg	OFS-170-8	10 / 10	-
Off-site Soil Area 170	COBALT	10.4		17.2		mg/kg	OFS-170-5	10 / 10	-
Off-site Soil Area 170	COPPER	30		135		mg/kg	OFS-170-8	10 / 10	-
Off-site Soil Area 170	IRON	20700		32900		mg/kg	OFS-170-5	10 / 10	-
Off-site Soil Area 170	LEAD	6.1		35		mg/kg	OFS-170-5	10 / 10	-
Off-site Soil Area 170	MAGNESIUM	6720		9460		mg/kg	OFS-170-8	10 / 10	-
Off-site Soil Area 170	MANGANESE	612		1520		mg/kg	OFS-170-2	10 / 10	-
Off-site Soil Area 170	MERCURY	0.045	J	0.093	J	mg/kg	OFS-170-5	2 / 10	0.1 - 0.11
Off-site Soil Area 170	NICKEL	12.6		38.6		mg/kg	OFS-170-8	10 / 10	-
Off-site Soil Area 170	POTASSIUM	1440	J+	2890		mg/kg	OFS-170-4	10 / 10	-
Off-site Soil Area 170	SILVER	0.083	J	0.14	J	mg/kg	OFS-170-8	3 / 10	1 - 1.1
Off-site Soil Area 170	SODIUM	67.9	J	237	J	mg/kg	OFS-170-9	10 / 10	-
Off-site Soil Area 170	THALLIUM	2.8		4.3		mg/kg	OFS-170-5	4 / 10	1.7 - 2.6
Off-site Soil Area 170	VANADIUM	38		64.5		mg/kg	OFS-170-5	10 / 10	-
Off-site Soil Area 170	ZINC	50.4		124		mg/kg	OFS-170-3	10 / 10	-
Off-site Soil Area 171	ALUMINUM	6680		13200		mg/kg	OFS-171-2	10 / 10	-
Off-site Soil Area 171	ANTIMONY	0.38	J	0.98	J	mg/kg	OFS-171-1	10 / 10	-
Off-site Soil Area 171	ARSENIC	16.5		97.6		mg/kg	OFS-171-2	10 / 10	-
Off-site Soil Area 171	BARIUM	84.9		136		mg/kg	OFS-171-2	10 / 10	-
Off-site Soil Area 171	BERYLLIUM	0.21	J	0.39	J	mg/kg	OFS-171-2	10 / 10	-
Off-site Soil Area 171	CADMIUM	0.35	J	1.1	J	mg/kg	OFS-171-4	10 / 10	-
Off-site Soil Area 171	CALCIUM	4480		10800		mg/kg	OFS-171-6	10 / 10	-
Off-site Soil Area 171	CHROMIUM	10.7		15.9		mg/kg	OFS-171-7	10 / 10	-
Off-site Soil Area 171	COBALT	6.6		12.9		mg/kg	OFS-171-1	10 / 10	-
Off-site Soil Area 171	COPPER	36.8		90.1		mg/kg	OFS-171-6	10 / 10	-
Off-site Soil Area 171	CYANIDE	0.2	J	0.34	J	mg/kg	OFS-171-5	4 / 10	0.17 - 2.6
Off-site Soil Area 171	IRON	15100		27500		mg/kg	OFS-171-2	10 / 10	-
Off-site Soil Area 171	LEAD	18.7		110		mg/kg	OFS-171-4	10 / 10	-
Off-site Soil Area 171	MAGNESIUM	3980		5750		mg/kg	OFS-171-9	10 / 10	-
Off-site Soil Area 171	MANGANESE	353		623		mg/kg	OFS-171-1	10 / 10	-
Off-site Soil Area 171	MERCURY	0.077	J	0.56	J	mg/kg	OFS-171-2	10 / 10	-
Off-site Soil Area 171	NICKEL	11		14		mg/kg	OFS-171-9	10 / 10	-
Off-site Soil Area 171	POTASSIUM	1530	J+	4520	J+	mg/kg	OFS-171-9	10 / 10	-
Off-site Soil Area 171	SELENIUM	0.56	J	0.87	J	mg/kg	OFS-171-2	6 / 10	3.5 - 3.6
Off-site Soil Area 171	SILVER	0.12	J	0.56	J	mg/kg	OFS-171-2	10 / 10	-
Off-site Soil Area 171	SODIUM	174	J	459	J	mg/kg	OFS-171-2	10 / 10	-
Off-site Soil Area 171	VANADIUM	28.2		43.1		mg/kg	OFS-171-2	10 / 10	-
Off-site Soil Area 171	ZINC	171		554		mg/kg	OFS-171-4	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 172	ALUMINUM	8960		14200		mg/kg	OFS-172-4	10 / 10	-
Off-site Soil Area 172	ANTIMONY	0.33	J	0.73	J	mg/kg	OFS-172-5	10 / 10	-
Off-site Soil Area 172	ARSENIC	6.3		13.9		mg/kg	OFS-172-5	10 / 10	-
Off-site Soil Area 172	BARIUM	102		295		mg/kg	OFS-172-7	10 / 10	-
Off-site Soil Area 172	BERYLLIUM	0.29	J	0.48	J	mg/kg	OFS-172-6	10 / 10	-
Off-site Soil Area 172	CADMIUM	0.062	J	0.33	J	mg/kg	OFS-172-9	6 / 10	0.51 - 0.53
Off-site Soil Area 172	CALCIUM	5520		9830		mg/kg	OFS-172-8	10 / 10	-
Off-site Soil Area 172	CHROMIUM	9.9		19.1		mg/kg	OFS-172-6	10 / 10	-
Off-site Soil Area 172	COBALT	9		14.4		mg/kg	OFS-172-5	10 / 10	-
Off-site Soil Area 172	COPPER	22.4		42.9		mg/kg	OFS-172-9	10 / 10	-
Off-site Soil Area 172	CYANIDE	0.23	J	0.49	J	mg/kg	OFS-172-9	3 / 10	2.5 - 2.7
Off-site Soil Area 172	IRON	15300		25300		mg/kg	OFS-172-5	10 / 10	-
Off-site Soil Area 172	LEAD	6.7		11.8		mg/kg	OFS-172-5	10 / 10	-
Off-site Soil Area 172	MAGNESIUM	4920		7440		mg/kg	OFS-172-8	10 / 10	-
Off-site Soil Area 172	MANGANESE	436		1280		mg/kg	OFS-172-7	10 / 10	-
Off-site Soil Area 172	MERCURY	0.053	J	0.053	J	mg/kg	OFS-172-9	1 / 10	0.099 - 0.11
Off-site Soil Area 172	NICKEL	10.4		26.7		mg/kg	OFS-172-6	10 / 10	-
Off-site Soil Area 172	POTASSIUM	1140	J+	3370	J+	mg/kg	OFS-172-8	10 / 10	-
Off-site Soil Area 172	SILVER	0.6	J	0.6	J	mg/kg	OFS-172-9	1 / 10	1 - 1.1
Off-site Soil Area 172	SODIUM	111	J	428	J	mg/kg	OFS-172-9	10 / 10	-
Off-site Soil Area 172	VANADIUM	27		46.5		mg/kg	OFS-172-5	10 / 10	-
Off-site Soil Area 172	ZINC	43.9		165		mg/kg	OFS-172-7	10 / 10	-
Off-site Soil Area 173	ALUMINUM	16100		25400		mg/kg	OFS-173-3	10 / 10	-
Off-site Soil Area 173	ANTIMONY	0.49	J	0.82	J	mg/kg	OFS-173-1	10 / 10	-
Off-site Soil Area 173	ARSENIC	15.8		27.1		mg/kg	OFS-173-3	10 / 10	-
Off-site Soil Area 173	BARIUM	177		309		mg/kg	OFS-173-1	10 / 10	-
Off-site Soil Area 173	BERYLLIUM	0.58		0.77		mg/kg	OFS-173-3	10 / 10	-
Off-site Soil Area 173	CADMIUM	0.29	J	0.94	J	mg/kg	OFS-173-1	10 / 10	-
Off-site Soil Area 173	CALCIUM	5900		25100		mg/kg	OFS-173-6	10 / 10	-
Off-site Soil Area 173	CHROMIUM	24.3		44.9		mg/kg	OFS-173-1	10 / 10	-
Off-site Soil Area 173	COBALT	12.2		20.2		mg/kg	OFS-173-1	10 / 10	-
Off-site Soil Area 173	COPPER	56.1	J	155	J	mg/kg	OFS-173-3	10 / 10	-
Off-site Soil Area 173	IRON	24000		38500		mg/kg	OFS-173-1	10 / 10	-
Off-site Soil Area 173	LEAD	17.1		32.5		mg/kg	OFS-173-3	10 / 10	-
Off-site Soil Area 173	MAGNESIUM	6980		10900		mg/kg	OFS-173-1	10 / 10	-
Off-site Soil Area 173	MANGANESE	740		2100		mg/kg	OFS-173-1	10 / 10	-
Off-site Soil Area 173	MERCURY	0.05	J	0.1	J	mg/kg	OFS-173-1	3 / 10	0.098 - 0.11
Off-site Soil Area 173	NICKEL	25.1		42.2		mg/kg	OFS-173-1	10 / 10	-
Off-site Soil Area 173	POTASSIUM	2210	J+	4470	J+	mg/kg	OFS-173-3	10 / 10	-
Off-site Soil Area 173	SELENIUM	0.67	J	0.67	J	mg/kg	OFS-173-3	1 / 10	3.5 - 3.8
Off-site Soil Area 173	SILVER	0.078	J-	0.27	J-	mg/kg	OFS-173-1	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 173	SODIUM	104	J	183	J	mg/kg	OFS-173-3	10 / 10	-
Off-site Soil Area 173	VANADIUM	44.9		75.7		mg/kg	OFS-173-1	10 / 10	-
Off-site Soil Area 173	ZINC	81.1		192		mg/kg	OFS-173-3	10 / 10	-
Off-site Soil Area 174	ALUMINUM	12300		22500		mg/kg	OFS-174-1	10 / 10	-
Off-site Soil Area 174	ANTIMONY	0.53	J	1	J	mg/kg	OFS-174-1	10 / 10	-
Off-site Soil Area 174	ARSENIC	16.9		55.1		mg/kg	OFS-174-1	10 / 10	-
Off-site Soil Area 174	BARIUM	149		333		mg/kg	OFS-174-3	10 / 10	-
Off-site Soil Area 174	BERYLLIUM	0.46	J	0.74		mg/kg	OFS-174-7	10 / 10	-
Off-site Soil Area 174	CADMIUM	0.49	J	1.8		mg/kg	OFS-174-7	10 / 10	-
Off-site Soil Area 174	CALCIUM	4670		11200		mg/kg	OFS-174-3	10 / 10	-
Off-site Soil Area 174	CHROMIUM	22.6		40.5		mg/kg	OFS-174-1	10 / 10	-
Off-site Soil Area 174	COBALT	10.1		18.7		mg/kg	OFS-174-1	10 / 10	-
Off-site Soil Area 174	COPPER	101	J	330	J	mg/kg	OFS-174-1	10 / 10	-
Off-site Soil Area 174	CYANIDE	0.32	J	0.61	J	mg/kg	OFS-174-7	5 / 10	0.18 - 2.6
Off-site Soil Area 174	IRON	20000		35200		mg/kg	OFS-174-1	10 / 10	-
Off-site Soil Area 174	LEAD	25.1		84.9		mg/kg	OFS-174-1	10 / 10	-
Off-site Soil Area 174	MAGNESIUM	5080		9420		mg/kg	OFS-174-1	10 / 10	-
Off-site Soil Area 174	MANGANESE	821		1950		mg/kg	OFS-174-9	10 / 10	-
Off-site Soil Area 174	MERCURY	0.047	J	0.15		mg/kg	OFS-174-4	10 / 10	-
Off-site Soil Area 174	NICKEL	20.3		37.6		mg/kg	OFS-174-1	10 / 10	-
Off-site Soil Area 174	POTASSIUM	2600	J+	5280	J+	mg/kg	OFS-174-4	10 / 10	-
Off-site Soil Area 174	SELENIUM	0.99	J	0.99	J	mg/kg	OFS-174-3	1 / 10	3.5 - 4.2
Off-site Soil Area 174	SILVER	0.19	J-	0.96	J-	mg/kg	OFS-174-1	10 / 10	-
Off-site Soil Area 174	SODIUM	94	J	401	J	mg/kg	OFS-174-4	10 / 10	-
Off-site Soil Area 174	VANADIUM	39.7		71.5		mg/kg	OFS-174-1	10 / 10	-
Off-site Soil Area 174	ZINC	110		611		mg/kg	OFS-174-3	10 / 10	-
Off-site Soil Area 175	ALUMINUM	9250		18600		mg/kg	OFS-175-1	10 / 10	-
Off-site Soil Area 175	ANTIMONY	0.39	J	1.3	J	mg/kg	OFS-175-9	10 / 10	-
Off-site Soil Area 175	ARSENIC	9.6		52.6		mg/kg	OFS-175-9	10 / 10	-
Off-site Soil Area 175	BARIUM	112		193		mg/kg	OFS-175-1	10 / 10	-
Off-site Soil Area 175	BERYLLIUM	0.28	J	0.54		mg/kg	OFS-175-1	10 / 10	-
Off-site Soil Area 175	CADMIUM	0.076	J	0.77		mg/kg	OFS-175-9	10 / 10	-
Off-site Soil Area 175	CALCIUM	5860		21100		mg/kg	OFS-175-8	10 / 10	-
Off-site Soil Area 175	CHROMIUM	11.7		19.1		mg/kg	OFS-175-9	10 / 10	-
Off-site Soil Area 175	COBALT	8.7		15.3		mg/kg	OFS-175-9	10 / 10	-
Off-site Soil Area 175	COPPER	24.3		99.5575		mg/kg	OFS-175-9	10 / 10	-
Off-site Soil Area 175	IRON	16100		30500		mg/kg	OFS-175-9	10 / 10	-
Off-site Soil Area 175	LEAD	7.8		52		mg/kg	OFS-175-9	10 / 10	-
Off-site Soil Area 175	MAGNESIUM	6050		8180		mg/kg	OFS-175-9	10 / 10	-
Off-site Soil Area 175	MANGANESE	403		827		mg/kg	OFS-175-1	10 / 10	-
Off-site Soil Area 175	MERCURY	0.048	J	0.18		mg/kg	OFS-175-4	8 / 10	0.1 - 0.11

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 175	NICKEL	11.5		19		mg/kg	OFS-175-7	10 / 10	-
Off-site Soil Area 175	POTASSIUM	1090	J+	3050	J+	mg/kg	OFS-175-5	10 / 10	-
Off-site Soil Area 175	SILVER	0.074	J	0.37	J	mg/kg	OFS-175-9	5 / 10	0.99 - 1
Off-site Soil Area 175	SODIUM	102	J	279	J	mg/kg	OFS-175-7	10 / 10	-
Off-site Soil Area 175	VANADIUM	29.8		52.9		mg/kg	OFS-175-9	10 / 10	-
Off-site Soil Area 175	ZINC	42.3		226		mg/kg	OFS-175-9	10 / 10	-
Off-site Soil Area 176	ALUMINUM	8100		15100		mg/kg	OFS-176-1	10 / 10	-
Off-site Soil Area 176	ANTIMONY	0.56	J	1.5	J	mg/kg	OFS-176-2	10 / 10	-
Off-site Soil Area 176	ARSENIC	10	J	106	J	mg/kg	OFS-176-2	10 / 10	-
Off-site Soil Area 176	BARIUM	122		361		mg/kg	OFS-176-6	10 / 10	-
Off-site Soil Area 176	BERYLLIUM	0.36	J	0.49	J	mg/kg	OFS-176-4	10 / 10	-
Off-site Soil Area 176	CADMIUM	0.46	J	3.2		mg/kg	OFS-176-9	10 / 10	-
Off-site Soil Area 176	CALCIUM	6280		25800		mg/kg	OFS-176-1	10 / 10	-
Off-site Soil Area 176	CHROMIUM	12.4		17.4		mg/kg	OFS-176-1	10 / 10	-
Off-site Soil Area 176	COBALT	7.3		14.2		mg/kg	OFS-176-1	10 / 10	-
Off-site Soil Area 176	COPPER	52.1	J	464	J	mg/kg	OFS-176-3	10 / 10	-
Off-site Soil Area 176	CYANIDE	0.32	J	0.36	J	mg/kg	OFS-176-1	2 / 10	0.17 - 2.7
Off-site Soil Area 176	IRON	12800		26800		mg/kg	OFS-176-1	10 / 10	-
Off-site Soil Area 176	LEAD	98.3	J	760	J	mg/kg	OFS-176-6	10 / 10	-
Off-site Soil Area 176	MAGNESIUM	4520		7170		mg/kg	OFS-176-1	10 / 10	-
Off-site Soil Area 176	MANGANESE	381	J	798	J	mg/kg	OFS-176-1	10 / 10	-
Off-site Soil Area 176	MERCURY	0.085	J+	1.6	J+	mg/kg	OFS-176-9	10 / 10	-
Off-site Soil Area 176	NICKEL	12.3		16.5		mg/kg	OFS-176-4	10 / 10	-
Off-site Soil Area 176	POTASSIUM	1710	J+	3440	J+	mg/kg	OFS-176-9	10 / 10	-
Off-site Soil Area 176	SELENIUM	0.68	J	2.2	J	mg/kg	OFS-176-2	6 / 10	3.6 - 3.8
Off-site Soil Area 176	SILVER	0.14	J	1.9		mg/kg	OFS-176-9	10 / 10	-
Off-site Soil Area 176	SODIUM	114	J	643		mg/kg	OFS-176-1	10 / 10	-
Off-site Soil Area 176	VANADIUM	23.9		45.4		mg/kg	OFS-176-1	10 / 10	-
Off-site Soil Area 176	ZINC	231		2550		mg/kg	OFS-176-1	10 / 10	-
Off-site Soil Area 177	ALUMINUM	7510		10300		mg/kg	OFS-177-8	10 / 10	-
Off-site Soil Area 177	ANTIMONY	0.4	J	0.79	J	mg/kg	OFS-177-3	10 / 10	-
Off-site Soil Area 177	ARSENIC	10.1	J	22.3	J	mg/kg	OFS-177-3	10 / 10	-
Off-site Soil Area 177	BARIUM	101		176		mg/kg	OFS-177-4	10 / 10	-
Off-site Soil Area 177	BERYLLIUM	0.44		0.5		mg/kg	OFS-177-8	2 / 10	0.33 - 0.47
Off-site Soil Area 177	CADMIUM	0.25	J	1.5		mg/kg	OFS-177-3	10 / 10	-
Off-site Soil Area 177	CALCIUM	3310		8060		mg/kg	OFS-177-1	10 / 10	-
Off-site Soil Area 177	CHROMIUM	11.5		20		mg/kg	OFS-177-5	10 / 10	-
Off-site Soil Area 177	COBALT	6.9		9.3		mg/kg	OFS-177-9	10 / 10	-
Off-site Soil Area 177	COPPER	38.6	J	212		mg/kg	OFS-177-8	10 / 10	-
Off-site Soil Area 177	CYANIDE	0.27	J	2.5		mg/kg	OFS-177-8	4 / 10	2.5 - 2.7
Off-site Soil Area 177	IRON	13400		19100		mg/kg	OFS-177-9	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 177	LEAD	32	J	228	J	mg/kg	OFS-177-3	10 / 10	-
Off-site Soil Area 177	MAGNESIUM	3500		5630		mg/kg	OFS-177-9	10 / 10	-
Off-site Soil Area 177	MANGANESE	418	J	550		mg/kg	OFS-177-9	10 / 10	-
Off-site Soil Area 177	MERCURY	0.058	J+	0.47	J+	mg/kg	OFS-177-3	10 / 10	-
Off-site Soil Area 177	NICKEL	10.8		19.7		mg/kg	OFS-177-9	10 / 10	-
Off-site Soil Area 177	POTASSIUM	1540	J+	3110	J+	mg/kg	OFS-177-3	10 / 10	-
Off-site Soil Area 177	SELENIUM	0.53	J	3.6		mg/kg	OFS-177-8	5 / 10	3.5 - 3.7
Off-site Soil Area 177	SILVER	0.097	J	1.1		mg/kg	OFS-177-3	8 / 10	1 - 1.1
Off-site Soil Area 177	SODIUM	90.2	J	202	J	mg/kg	OFS-177-6	10 / 10	-
Off-site Soil Area 177	THALLIUM	2.5		2.5		mg/kg	OFS-177-8	2 / 10	2.5 - 2.7
Off-site Soil Area 177	VANADIUM	23.5		31.6		mg/kg	OFS-177-9	10 / 10	-
Off-site Soil Area 177	ZINC	81.9		348		mg/kg	OFS-177-3	10 / 10	-
Off-site Soil Area 178	ALUMINUM	8750		19600		mg/kg	OFS-178-8	10 / 10	-
Off-site Soil Area 178	ANTIMONY	0.44	J	1.6	J	mg/kg	OFS-178-8	10 / 10	-
Off-site Soil Area 178	ARSENIC	17.4	J	79.1	J	mg/kg	OFS-178-8	10 / 10	-
Off-site Soil Area 178	BARIUM	113		213		mg/kg	OFS-178-1	10 / 10	-
Off-site Soil Area 178	BERYLLIUM	0.37	J	0.61		mg/kg	OFS-178-1	10 / 10	-
Off-site Soil Area 178	CADMIUM	0.59		2		mg/kg	OFS-178-1	10 / 10	-
Off-site Soil Area 178	CALCIUM	4160		10600		mg/kg	OFS-178-9	10 / 10	-
Off-site Soil Area 178	CHROMIUM	13.5	J	24	J	mg/kg	OFS-178-8	10 / 10	-
Off-site Soil Area 178	COBALT	7.8		14.1		mg/kg	OFS-178-1	10 / 10	-
Off-site Soil Area 178	COPPER	64	J	125		mg/kg	OFS-178-2	10 / 10	-
Off-site Soil Area 178	CYANIDE	0.19	J	0.56	J	mg/kg	OFS-178-9	2 / 10	0.19 - 2.6
Off-site Soil Area 178	IRON	18800	J	37000	J	mg/kg	OFS-178-8	10 / 10	-
Off-site Soil Area 178	LEAD	85		234		mg/kg	OFS-178-9	10 / 10	-
Off-site Soil Area 178	MAGNESIUM	4240		13000		mg/kg	OFS-178-8	10 / 10	-
Off-site Soil Area 178	MANGANESE	438		754		mg/kg	OFS-178-1	10 / 10	-
Off-site Soil Area 178	MERCURY	0.093	J	0.39		mg/kg	OFS-178-8	10 / 10	-
Off-site Soil Area 178	NICKEL	12.9	J	21.3		mg/kg	OFS-178-1	10 / 10	-
Off-site Soil Area 178	POTASSIUM	2280	J+	4810	J+	mg/kg	OFS-178-1	10 / 10	-
Off-site Soil Area 178	SELENIUM	0.55	J	3.4	J	mg/kg	OFS-178-8	6 / 10	3.4 - 3.6
Off-site Soil Area 178	SILVER	0.24	J	1		mg/kg	OFS-178-8	10 / 10	-
Off-site Soil Area 178	SODIUM	107	J	206	J	mg/kg	OFS-178-8	10 / 10	-
Off-site Soil Area 178	VANADIUM	29.2		49.1		mg/kg	OFS-178-1	10 / 10	-
Off-site Soil Area 178	ZINC	169		574		mg/kg	OFS-178-9	10 / 10	-
Off-site Soil Area 179	ALUMINUM	14700		20300		mg/kg	OFS-179-5	10 / 10	-
Off-site Soil Area 179	ANTIMONY	0.33	J	0.76	J	mg/kg	OFS-179-4	10 / 10	-
Off-site Soil Area 179	ARSENIC	11.5	J	39.1	J	mg/kg	OFS-179-1	10 / 10	-
Off-site Soil Area 179	BARIUM	185		260		mg/kg	OFS-179-4	10 / 10	-
Off-site Soil Area 179	BERYLLIUM	0.55		0.78		mg/kg	OFS-179-5	10 / 10	-
Off-site Soil Area 179	CADMIUM	0.26	J	1.7		mg/kg	OFS-179-2	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 179	CALCIUM	5340		8240		mg/kg	OFS-179-4	10 / 10	-
Off-site Soil Area 179	CHROMIUM	19.6	J	36.5	J	mg/kg	OFS-179-9	10 / 10	-
Off-site Soil Area 179	COBALT	9.6		13		mg/kg	OFS-179-4	10 / 10	-
Off-site Soil Area 179	COPPER	35.5	J	136	J	mg/kg	OFS-179-9	10 / 10	-
Off-site Soil Area 179	CYANIDE	0.2	J	0.21	J	mg/kg	OFS-179-9	2 / 10	2.6 - 2.7
Off-site Soil Area 179	IRON	21900	J	29500	J	mg/kg	OFS-179-9	10 / 10	-
Off-site Soil Area 179	LEAD	19.4		121		mg/kg	OFS-179-7	10 / 10	-
Off-site Soil Area 179	MAGNESIUM	5800		7350		mg/kg	OFS-179-4	10 / 10	-
Off-site Soil Area 179	MANGANESE	537	J	986	J	mg/kg	OFS-179-1	10 / 10	-
Off-site Soil Area 179	MERCURY	0.055	J	0.21		mg/kg	OFS-179-9	9 / 10	0.11 - 0.11
Off-site Soil Area 179	NICKEL	22.7	J	34.4	J	mg/kg	OFS-179-4	10 / 10	-
Off-site Soil Area 179	POTASSIUM	1670	J+	3860	J+	mg/kg	OFS-179-6	10 / 10	-
Off-site Soil Area 179	SELENIUM	0.61	J	0.61	J	mg/kg	OFS-179-9	1 / 10	3.5 - 3.8
Off-site Soil Area 179	SILVER	0.13	J	0.67	J	mg/kg	OFS-179-9	9 / 10	1.1 - 1.1
Off-site Soil Area 179	SODIUM	106	J	364	J	mg/kg	OFS-179-9	10 / 10	-
Off-site Soil Area 179	VANADIUM	35.9		43.9		mg/kg	OFS-179-4	10 / 10	-
Off-site Soil Area 179	ZINC	77		342		mg/kg	OFS-179-2	10 / 10	-
Off-site Soil Area 180	ALUMINUM	6160		13200		mg/kg	OFS-180-1	10 / 10	-
Off-site Soil Area 180	ANTIMONY	0.4	J	1.9	J	mg/kg	OFS-180-1	8 / 10	6 - 6.1
Off-site Soil Area 180	ARSENIC	8.8		241	J	mg/kg	OFS-180-1	10 / 10	-
Off-site Soil Area 180	BARIUM	75.4		186		mg/kg	OFS-180-8	10 / 10	-
Off-site Soil Area 180	BERYLLIUM	0.23	J	0.56		mg/kg	OFS-180-7	10 / 10	-
Off-site Soil Area 180	CADMIUM	0.16	J	2.7		mg/kg	OFS-180-1	10 / 10	-
Off-site Soil Area 180	CALCIUM	4060		11500		mg/kg	OFS-180-9	10 / 10	-
Off-site Soil Area 180	CHROMIUM	10.1		25.7	J	mg/kg	OFS-180-1	10 / 10	-
Off-site Soil Area 180	COBALT	6.7		10.6		mg/kg	OFS-180-7	10 / 10	-
Off-site Soil Area 180	COPPER	30.9		357		mg/kg	OFS-180-8	10 / 10	-
Off-site Soil Area 180	CYANIDE	0.2	J	0.82	J	mg/kg	OFS-180-1	5 / 10	2.4 - 2.7
Off-site Soil Area 180	IRON	11200		26900	J	mg/kg	OFS-180-1	10 / 10	-
Off-site Soil Area 180	LEAD	15.5		368		mg/kg	OFS-180-8	10 / 10	-
Off-site Soil Area 180	MAGNESIUM	3620		5800		mg/kg	OFS-180-3	10 / 10	-
Off-site Soil Area 180	MANGANESE	280		597		mg/kg	OFS-180-7	10 / 10	-
Off-site Soil Area 180	MERCURY	0.043	J	1.7		mg/kg	OFS-180-1	9 / 10	0.1 - 0.1
Off-site Soil Area 180	NICKEL	11.1		16.8	J	mg/kg	OFS-180-1	10 / 10	-
Off-site Soil Area 180	POTASSIUM	1890	J+	3650	J+	mg/kg	OFS-180-8	10 / 10	-
Off-site Soil Area 180	SELENIUM	0.74	J	3.1	J	mg/kg	OFS-180-1	6 / 10	3.5 - 3.6
Off-site Soil Area 180	SILVER	0.15	J	2.7		mg/kg	OFS-180-8	8 / 10	1 - 1
Off-site Soil Area 180	SODIUM	112	J	534		mg/kg	OFS-180-1	10 / 10	-
Off-site Soil Area 180	VANADIUM	21.5		40		mg/kg	OFS-180-1	10 / 10	-
Off-site Soil Area 180	ZINC	63		914		mg/kg	OFS-180-1	10 / 10	-
Off-site Soil Area 181	ALUMINUM	7010		10700		mg/kg	OFS-181-2	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 181	ANTIMONY	0.43	J	3.4	J	mg/kg	OFS-181-6	10 / 10	-
Off-site Soil Area 181	ARSENIC	20.2		102		mg/kg	OFS-181-2	10 / 10	-
Off-site Soil Area 181	BARIUM	118		257		mg/kg	OFS-181-7	10 / 10	-
Off-site Soil Area 181	BERYLLIUM	0.35	J	0.51		mg/kg	OFS-181-1	10 / 10	-
Off-site Soil Area 181	CADMIUM	0.47	J	7.4		mg/kg	OFS-181-7	10 / 10	-
Off-site Soil Area 181	CALCIUM	2530		7540		mg/kg	OFS-181-2	10 / 10	-
Off-site Soil Area 181	CHROMIUM	14.3		36.7		mg/kg	OFS-181-7	10 / 10	-
Off-site Soil Area 181	COBALT	9.1		11.9		mg/kg	OFS-181-6	10 / 10	-
Off-site Soil Area 181	COPPER	51.6		298		mg/kg	OFS-181-4	10 / 10	-
Off-site Soil Area 181	CYANIDE	0.48	J	3.3		mg/kg	OFS-181-8	9 / 10	2.7 - 2.7
Off-site Soil Area 181	IRON	16200		45600		mg/kg	OFS-181-6	10 / 10	-
Off-site Soil Area 181	LEAD	36.7		958		mg/kg	OFS-181-6	10 / 10	-
Off-site Soil Area 181	MAGNESIUM	2900		6140		mg/kg	OFS-181-2	10 / 10	-
Off-site Soil Area 181	MANGANESE	505		667		mg/kg	OFS-181-7	10 / 10	-
Off-site Soil Area 181	MERCURY	0.11		1.2		mg/kg	OFS-181-6	10 / 10	-
Off-site Soil Area 181	NICKEL	15		30.6		mg/kg	OFS-181-6	10 / 10	-
Off-site Soil Area 181	POTASSIUM	1690	J+	3300	J+	mg/kg	OFS-181-3	10 / 10	-
Off-site Soil Area 181	SELENIUM	0.78	J	2	J	mg/kg	OFS-181-6	8 / 10	3.5 - 3.8
Off-site Soil Area 181	SILVER	0.15	J	2.3		mg/kg	OFS-181-6	10 / 10	-
Off-site Soil Area 181	SODIUM	127	J	244	J	mg/kg	OFS-181-8	10 / 10	-
Off-site Soil Area 181	VANADIUM	24.6		33.7		mg/kg	OFS-181-2	10 / 10	-
Off-site Soil Area 181	ZINC	122		1660		mg/kg	OFS-181-7	10 / 10	-
Off-site Soil Area 182	ALUMINUM	5690		14000		mg/kg	OFS-182-7	10 / 10	-
Off-site Soil Area 182	ANTIMONY	0.58	J	2.1	J	mg/kg	OFS-182-4	10 / 10	-
Off-site Soil Area 182	ARSENIC	23.2		84		mg/kg	OFS-182-4	10 / 10	-
Off-site Soil Area 182	BARIUM	132		635		mg/kg	OFS-182-2	10 / 10	-
Off-site Soil Area 182	BERYLLIUM	0.21	J	0.57		mg/kg	OFS-182-7	10 / 10	-
Off-site Soil Area 182	CADMIUM	0.7		12.2		mg/kg	OFS-182-4	10 / 10	-
Off-site Soil Area 182	CALCIUM	3380		10100		mg/kg	OFS-182-7	10 / 10	-
Off-site Soil Area 182	CHROMIUM	16		180		mg/kg	OFS-182-2	10 / 10	-
Off-site Soil Area 182	COBALT	6.6		18.1		mg/kg	OFS-182-8	10 / 10	-
Off-site Soil Area 182	COPPER	61.4		850		mg/kg	OFS-182-4	10 / 10	-
Off-site Soil Area 182	CYANIDE	0.17	J	0.29	J	mg/kg	OFS-182-7	7 / 10	0.17 - 2.7
Off-site Soil Area 182	IRON	14200		50600		mg/kg	OFS-182-4	10 / 10	-
Off-site Soil Area 182	LEAD	55.7		1250		mg/kg	OFS-182-2	10 / 10	-
Off-site Soil Area 182	MAGNESIUM	2930		6660		mg/kg	OFS-182-8	10 / 10	-
Off-site Soil Area 182	MANGANESE	414		731		mg/kg	OFS-182-8	10 / 10	-
Off-site Soil Area 182	MERCURY	0.075	J	0.72		mg/kg	OFS-182-4	9 / 10	0.1 - 0.1
Off-site Soil Area 182	NICKEL	10.3		29.6		mg/kg	OFS-182-8	10 / 10	-
Off-site Soil Area 182	POTASSIUM	1560	J+	3250	J+	mg/kg	OFS-182-1	10 / 10	-
Off-site Soil Area 182	SELENIUM	0.63	J	1.6	J	mg/kg	OFS-182-4	3 / 10	3.5 - 3.7

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 182	SILVER	0.19	J	2.3		mg/kg	OFS-182-6	10 / 10	-
Off-site Soil Area 182	SODIUM	109	J	417	J	mg/kg	OFS-182-1	10 / 10	-
Off-site Soil Area 182	VANADIUM	22.4		48.2		mg/kg	OFS-182-8	10 / 10	-
Off-site Soil Area 182	ZINC	188		1270		mg/kg	OFS-182-2	10 / 10	-
Off-site Soil Area 183	ALUMINUM	10900		17300		mg/kg	OFS-183-1	9 / 9	-
Off-site Soil Area 183	ANTIMONY	0.63		1.1		mg/kg	OFS-183-1	9 / 9	-
Off-site Soil Area 183	ARSENIC	23.2		35.7		mg/kg	OFS-183-9	9 / 9	-
Off-site Soil Area 183	BARIUM	166		254		mg/kg	OFS-183-3	9 / 9	-
Off-site Soil Area 183	BERYLLIUM	0.52		0.81		mg/kg	OFS-183-8	9 / 9	-
Off-site Soil Area 183	CADMIUM	0.2		0.81		mg/kg	OFS-183-4	9 / 9	-
Off-site Soil Area 183	CALCIUM	1690		14500		mg/kg	OFS-183-9	9 / 9	-
Off-site Soil Area 183	CHROMIUM	31.3		57		mg/kg	OFS-183-1	9 / 9	-
Off-site Soil Area 183	COBALT	15.2		27.1		mg/kg	OFS-183-1	9 / 9	-
Off-site Soil Area 183	COPPER	51.8		130		mg/kg	OFS-183-4	9 / 9	-
Off-site Soil Area 183	CYANIDE	0.2		4.6		mg/kg	OFS-183-3	10 / 10	2.6 - 2.6
Off-site Soil Area 183	IRON	24200		40100		mg/kg	OFS-183-1	9 / 9	-
Off-site Soil Area 183	LEAD	20.1		39.8		mg/kg	OFS-183-4	9 / 9	-
Off-site Soil Area 183	MAGNESIUM	5230		10900		mg/kg	OFS-183-1	9 / 9	-
Off-site Soil Area 183	MANGANESE	1380		2800		mg/kg	OFS-183-3	9 / 9	-
Off-site Soil Area 183	MERCURY	0.062		0.13		mg/kg	OFS-183-7	9 / 9	-
Off-site Soil Area 183	NICKEL	25.7		43.5		mg/kg	OFS-183-1	9 / 9	-
Off-site Soil Area 183	POTASSIUM	3200		6820		mg/kg	OFS-183-3	9 / 9	-
Off-site Soil Area 183	SELENIUM	3.4		3.7		mg/kg	OFS-183-3	9 / 9	-
Off-site Soil Area 183	SILVER	0.15		1		mg/kg	OFS-183-8	9 / 9	-
Off-site Soil Area 183	SODIUM	61.4		840		mg/kg	OFS-183-3	9 / 9	-
Off-site Soil Area 183	THALLIUM	2.5		2.6		mg/kg	OFS-183-3	9 / 9	-
Off-site Soil Area 183	VANADIUM	49.1		94.1		mg/kg	OFS-183-1	9 / 9	-
Off-site Soil Area 183	ZINC	63.4		112		mg/kg	OFS-183-4	9 / 9	-
Off-site Soil Area 184	ALUMINUM	8040		12700		mg/kg	OFS-184-2	10 / 10	-
Off-site Soil Area 184	ANTIMONY	0.33		0.72	J	mg/kg	OFS-184-8	10 / 10	-
Off-site Soil Area 184	ARSENIC	5.7		14.7		mg/kg	OFS-184-3	10 / 10	-
Off-site Soil Area 184	BARIUM	68.1		190		mg/kg	OFS-184-1	10 / 10	-
Off-site Soil Area 184	BERYLLIUM	0.24		0.57		mg/kg	OFS-184-2	10 / 10	-
Off-site Soil Area 184	CADMIUM	0.073		0.5		mg/kg	OFS-184-5	10 / 10	-
Off-site Soil Area 184	CALCIUM	4240		38300		mg/kg	OFS-184-7	10 / 10	-
Off-site Soil Area 184	CHROMIUM	11.6		18.2		mg/kg	OFS-184-1	10 / 10	-
Off-site Soil Area 184	COBALT	8.4		12.2		mg/kg	OFS-184-1	10 / 10	-
Off-site Soil Area 184	COPPER	20.3		433		mg/kg	OFS-184-8	10 / 10	-
Off-site Soil Area 184	CYANIDE	0.69	J	2.7		mg/kg	OFS-184-1	7 / 10	2.5 - 2.7
Off-site Soil Area 184	IRON	15400		18800		mg/kg	OFS-184-2	10 / 10	-
Off-site Soil Area 184	LEAD	7.3		48		mg/kg	OFS-184-3	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 184	MAGNESIUM	3560		7090		mg/kg	OFS-184-1	10 / 10	-
Off-site Soil Area 184	MANGANESE	346		635		mg/kg	OFS-184-1	10 / 10	-
Off-site Soil Area 184	MERCURY	0.044		0.13		mg/kg	OFS-184-4	7 / 10	0.099 - 0.1
Off-site Soil Area 184	NICKEL	12.9		21.5		mg/kg	OFS-184-1	10 / 10	-
Off-site Soil Area 184	POTASSIUM	1170		4170		mg/kg	OFS-184-2	10 / 10	-
Off-site Soil Area 184	SELENIUM	3.5		3.7		mg/kg	OFS-184-1	6 / 10	3.6 - 3.6
Off-site Soil Area 184	SILVER	0.13		1.1		mg/kg	OFS-184-1	7 / 10	1 - 1
Off-site Soil Area 184	SODIUM	114	J	379	J	mg/kg	OFS-184-8	10 / 10	-
Off-site Soil Area 184	THALLIUM	2.5		2.6		mg/kg	OFS-184-1	6 / 10	2.5 - 2.6
Off-site Soil Area 184	VANADIUM	27.9		36.2		mg/kg	OFS-184-1	10 / 10	-
Off-site Soil Area 184	ZINC	37.5		130		mg/kg	OFS-184-3	10 / 10	-
Off-site Soil Area 185	ALUMINUM	10800		18900		mg/kg	OFS-185-7	10 / 10	-
Off-site Soil Area 185	ANTIMONY	0.38	J	0.96	J	mg/kg	OFS-185-4	10 / 10	-
Off-site Soil Area 185	ARSENIC	8.1	J	121	J	mg/kg	OFS-185-4	10 / 10	-
Off-site Soil Area 185	BARIUM	36.8		224		mg/kg	OFS-185-5	10 / 10	-
Off-site Soil Area 185	BERYLLIUM	0.13	J	0.55		mg/kg	OFS-185-1	10 / 10	-
Off-site Soil Area 185	CADMIUM	0.091	J	1.2		mg/kg	OFS-185-4	10 / 10	-
Off-site Soil Area 185	CALCIUM	12000		40800		mg/kg	OFS-185-2	10 / 10	-
Off-site Soil Area 185	CHROMIUM	14.1		68.6		mg/kg	OFS-185-7	10 / 10	-
Off-site Soil Area 185	COBALT	9.9		38.3		mg/kg	OFS-185-7	10 / 10	-
Off-site Soil Area 185	COPPER	19.2		109		mg/kg	OFS-185-7	10 / 10	-
Off-site Soil Area 185	IRON	16900		34600		mg/kg	OFS-185-7	10 / 10	-
Off-site Soil Area 185	LEAD	7.4		98.5		mg/kg	OFS-185-4	10 / 10	-
Off-site Soil Area 185	MAGNESIUM	5720		15400		mg/kg	OFS-185-7	10 / 10	-
Off-site Soil Area 185	MANGANESE	506		767		mg/kg	OFS-185-9	10 / 10	-
Off-site Soil Area 185	MERCURY	0.062	J	0.55		mg/kg	OFS-185-4	5 / 10	0.043 - 0.11
Off-site Soil Area 185	NICKEL	16		71.6		mg/kg	OFS-185-7	10 / 10	-
Off-site Soil Area 185	POTASSIUM	518	J+	1950	J+	mg/kg	OFS-185-6	10 / 10	-
Off-site Soil Area 185	SELENIUM	0.59	J	0.59	J	mg/kg	OFS-185-4	1 / 10	3.5 - 3.8
Off-site Soil Area 185	SILVER	0.1	J	0.46	J	mg/kg	OFS-185-4	3 / 10	1 - 1.1
Off-site Soil Area 185	SODIUM	110	J	185	J	mg/kg	OFS-185-1	10 / 10	-
Off-site Soil Area 185	VANADIUM	31.7		78.6		mg/kg	OFS-185-7	10 / 10	-
Off-site Soil Area 185	ZINC	46.6		372		mg/kg	OFS-185-4	10 / 10	-
Off-site Soil Area 186	ALUMINUM	12700		18500		mg/kg	OFS-186-3	10 / 10	-
Off-site Soil Area 186	ANTIMONY	0.35	J	0.69	J	mg/kg	OFS-186-8	10 / 10	-
Off-site Soil Area 186	ARSENIC	6.3		16.9		mg/kg	OFS-186-6	10 / 10	-
Off-site Soil Area 186	BARIUM	129		273		mg/kg	OFS-186-3	10 / 10	-
Off-site Soil Area 186	BERYLLIUM	0.37	J	0.73		mg/kg	OFS-186-3	10 / 10	-
Off-site Soil Area 186	CADMIUM	0.17	J	0.73		mg/kg	OFS-186-7	10 / 10	-
Off-site Soil Area 186	CALCIUM	5260		12400		mg/kg	OFS-186-8	10 / 10	-
Off-site Soil Area 186	CHROMIUM	17		22.9		mg/kg	OFS-186-3	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 186	COBALT	9.9		13.2		mg/kg	OFS-186-9	10 / 10	-
Off-site Soil Area 186	COPPER	31.5		107		mg/kg	OFS-186-4	10 / 10	-
Off-site Soil Area 186	CYANIDE	0.5	J	0.5	J	mg/kg	OFS-186-5	1 / 10	2.6 - 2.7
Off-site Soil Area 186	IRON	16600		23600		mg/kg	OFS-186-4	10 / 10	-
Off-site Soil Area 186	LEAD	10.4		83.5		mg/kg	OFS-186-6	10 / 10	-
Off-site Soil Area 186	MAGNESIUM	6000		6930		mg/kg	OFS-186-8	10 / 10	-
Off-site Soil Area 186	MANGANESE	535		711		mg/kg	OFS-186-3	10 / 10	-
Off-site Soil Area 186	MERCURY	0.05	J	0.11		mg/kg	OFS-186-8	10 / 10	-
Off-site Soil Area 186	NICKEL	20.7		31.9		mg/kg	OFS-186-3	10 / 10	-
Off-site Soil Area 186	POTASSIUM	1390	J+	4410	J+	mg/kg	OFS-186-5	10 / 10	-
Off-site Soil Area 186	SILVER	0.12	J	0.28	J	mg/kg	OFS-186-6	5 / 10	1 - 1.1
Off-site Soil Area 186	SODIUM	98	J	189	J	mg/kg	OFS-186-9	10 / 10	-
Off-site Soil Area 186	VANADIUM	32		40.4		mg/kg	OFS-186-3	10 / 10	-
Off-site Soil Area 186	ZINC	50.3		173		mg/kg	OFS-186-6	10 / 10	-
Off-site Soil Area 187	ALUMINUM	11500		18200		mg/kg	OFS-187-6	10 / 10	-
Off-site Soil Area 187	ARSENIC	2.8	J	36.3	J	mg/kg	OFS-187-1	10 / 10	-
Off-site Soil Area 187	BARIUM	42.8		377		mg/kg	OFS-187-1	10 / 10	-
Off-site Soil Area 187	BERYLLIUM	0.58	J	1.2	J	mg/kg	OFS-187-5	9 / 10	0.42 - 0.48
Off-site Soil Area 187	CADMIUM	0.93		2		mg/kg	OFS-187-7	10 / 10	-
Off-site Soil Area 187	CALCIUM	3850		24600		mg/kg	OFS-187-1	10 / 10	-
Off-site Soil Area 187	CHROMIUM	26		39.5		mg/kg	OFS-187-5	10 / 10	-
Off-site Soil Area 187	COBALT	14.6		58.8		mg/kg	OFS-187-5	10 / 10	-
Off-site Soil Area 187	COPPER	30		168		mg/kg	OFS-187-8	10 / 10	-
Off-site Soil Area 187	IRON	23100		32500		mg/kg	OFS-187-5	10 / 10	-
Off-site Soil Area 187	LEAD	5.3		56.1		mg/kg	OFS-187-8	10 / 10	-
Off-site Soil Area 187	MAGNESIUM	7980		11500		mg/kg	OFS-187-6	10 / 10	-
Off-site Soil Area 187	MANGANESE	373		1840		mg/kg	OFS-187-1	10 / 10	-
Off-site Soil Area 187	MERCURY	0.096	J	0.096	J	mg/kg	OFS-187-9	1 / 10	0.033 - 0.11
Off-site Soil Area 187	NICKEL	30.5		44.5		mg/kg	OFS-187-5	10 / 10	-
Off-site Soil Area 187	POTASSIUM	1150	J+	3690	J+	mg/kg	OFS-187-9	10 / 10	-
Off-site Soil Area 187	SELENIUM	0.24	J	0.24	J	mg/kg	OFS-187-5	1 / 10	3.6 - 3.7
Off-site Soil Area 187	SODIUM	95.9	J	363	J	mg/kg	OFS-187-8	9 / 10	112 - 112
Off-site Soil Area 187	THALLIUM	0.089	J	0.48	J	mg/kg	OFS-187-8	9 / 10	0.17 - 0.17
Off-site Soil Area 187	VANADIUM	48.7		64.3		mg/kg	OFS-187-1	10 / 10	-
Off-site Soil Area 187	ZINC	25.3		166		mg/kg	OFS-187-7	10 / 10	-
Off-site Soil Area 188	ALUMINUM	8450		15800		mg/kg	OFS-188-2	10 / 10	-
Off-site Soil Area 188	ANTIMONY	0.68	J	2	J	mg/kg	OFS-188-1	10 / 10	-
Off-site Soil Area 188	ARSENIC	23.8		72.6		mg/kg	OFS-188-1	10 / 10	-
Off-site Soil Area 188	BARIUM	112		203		mg/kg	OFS-188-1	10 / 10	-
Off-site Soil Area 188	BERYLLIUM	0.34	J	0.6		mg/kg	OFS-188-2	10 / 10	-
Off-site Soil Area 188	CADMIUM	0.67		3.6		mg/kg	OFS-188-1	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 188	CALCIUM	2760		5830		mg/kg	OFS-188-1	10 / 10	-
Off-site Soil Area 188	CHROMIUM	12.2		20.1		mg/kg	OFS-188-7	10 / 10	-
Off-site Soil Area 188	COBALT	8.4		12.5		mg/kg	OFS-188-1	10 / 10	-
Off-site Soil Area 188	COPPER	68.3		585		mg/kg	OFS-188-1	10 / 10	-
Off-site Soil Area 188	CYANIDE	0.19	J	0.24	J	mg/kg	OFS-188-4	3 / 10	0.17 - 2.6
Off-site Soil Area 188	IRON	16600		24900		mg/kg	OFS-188-1	10 / 10	-
Off-site Soil Area 188	LEAD	75.4		479		mg/kg	OFS-188-1	10 / 10	-
Off-site Soil Area 188	MAGNESIUM	3520		6410		mg/kg	OFS-188-2	10 / 10	-
Off-site Soil Area 188	MANGANESE	407		618		mg/kg	OFS-188-2	10 / 10	-
Off-site Soil Area 188	MERCURY	0.1		0.56		mg/kg	OFS-188-1	10 / 10	-
Off-site Soil Area 188	NICKEL	11.8		19.8		mg/kg	OFS-188-1	10 / 10	-
Off-site Soil Area 188	POTASSIUM	2320	J+	4070	J+	mg/kg	OFS-188-1	10 / 10	-
Off-site Soil Area 188	SELENIUM	1	J	2.1	J	mg/kg	OFS-188-1	3 / 10	3.5 - 3.6
Off-site Soil Area 188	SILVER	0.27	J	3.3		mg/kg	OFS-188-1	10 / 10	-
Off-site Soil Area 188	SODIUM	105	J	162	J	mg/kg	OFS-188-1	10 / 10	-
Off-site Soil Area 188	VANADIUM	26.8		38.1		mg/kg	OFS-188-2	10 / 10	-
Off-site Soil Area 188	ZINC	200		782		mg/kg	OFS-188-1	10 / 10	-
Off-site Soil Area 189	ALUMINUM	10800		19800		mg/kg	OFS-189-4	10 / 10	-
Off-site Soil Area 189	ANTIMONY	0.42	J	0.91	J	mg/kg	OFS-189-1	10 / 10	-
Off-site Soil Area 189	ARSENIC	11.9	J	32.8		mg/kg	OFS-189-1	10 / 10	-
Off-site Soil Area 189	BARIUM	124		230		mg/kg	OFS-189-7	10 / 10	-
Off-site Soil Area 189	BERYLLIUM	0.4	J	0.74		mg/kg	OFS-189-4	10 / 10	-
Off-site Soil Area 189	CADMIUM	0.13	J	1.5		mg/kg	OFS-189-1	10 / 10	-
Off-site Soil Area 189	CALCIUM	4250		8640		mg/kg	OFS-189-5	10 / 10	-
Off-site Soil Area 189	CHROMIUM	13.9		36.9		mg/kg	OFS-189-1	10 / 10	-
Off-site Soil Area 189	COBALT	9		11.8		mg/kg	OFS-189-4	10 / 10	-
Off-site Soil Area 189	COPPER	26.2		491		mg/kg	OFS-189-2	10 / 10	-
Off-site Soil Area 189	CYANIDE	0.24	J	0.26	J	mg/kg	OFS-189-8	2 / 10	0.17 - 2.9
Off-site Soil Area 189	IRON	18100		24700		mg/kg	OFS-189-4	10 / 10	-
Off-site Soil Area 189	LEAD	11.5		101		mg/kg	OFS-189-1	10 / 10	-
Off-site Soil Area 189	MAGNESIUM	4480		7040		mg/kg	OFS-189-4	10 / 10	-
Off-site Soil Area 189	MANGANESE	448		649		mg/kg	OFS-189-8	10 / 10	-
Off-site Soil Area 189	MERCURY	0.056	J	0.17		mg/kg	OFS-189-1	9 / 10	0.1 - 0.1
Off-site Soil Area 189	NICKEL	14.4		21.3		mg/kg	OFS-189-4	10 / 10	-
Off-site Soil Area 189	POTASSIUM	1430	J+	3700	J+	mg/kg	OFS-189-8	10 / 10	-
Off-site Soil Area 189	SELENIUM	0.64	J	0.64	J	mg/kg	OFS-189-8	1 / 10	3.5 - 4
Off-site Soil Area 189	SILVER	0.095	J	0.52	J	mg/kg	OFS-189-1	9 / 10	1.1 - 1.1
Off-site Soil Area 189	SODIUM	120	J	203	J	mg/kg	OFS-189-8	10 / 10	-
Off-site Soil Area 189	VANADIUM	31.2		42.7		mg/kg	OFS-189-4	10 / 10	-
Off-site Soil Area 189	ZINC	50.6		323		mg/kg	OFS-189-9	10 / 10	-
Off-site Soil Area 190	ALUMINUM	13700		19400		mg/kg	OFS-190-9	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 190	ANTIMONY	0.41	J	1.2	J	mg/kg	OFS-190-5	10 / 10	-
Off-site Soil Area 190	ARSENIC	13.3	J	71.7	J	mg/kg	OFS-190-6	10 / 10	-
Off-site Soil Area 190	BARIUM	199		450		mg/kg	OFS-190-3	10 / 10	-
Off-site Soil Area 190	BERYLLIUM	0.5		0.82		mg/kg	OFS-190-9	10 / 10	-
Off-site Soil Area 190	CADMIUM	0.3	J	4.4		mg/kg	OFS-190-6	10 / 10	-
Off-site Soil Area 190	CALCIUM	5940		73300		mg/kg	OFS-190-9	10 / 10	-
Off-site Soil Area 190	CHROMIUM	16.6		30.5		mg/kg	OFS-190-4	10 / 10	-
Off-site Soil Area 190	COBALT	10.9		16.7		mg/kg	OFS-190-9	10 / 10	-
Off-site Soil Area 190	COPPER	37.6		307		mg/kg	OFS-190-7	10 / 10	-
Off-site Soil Area 190	CYANIDE	0.19	J	0.19	J	mg/kg	OFS-190-1	1 / 10	2.5 - 2.6
Off-site Soil Area 190	IRON	20800		27100		mg/kg	OFS-190-6	10 / 10	-
Off-site Soil Area 190	LEAD	14.9		228		mg/kg	OFS-190-6	10 / 10	-
Off-site Soil Area 190	MAGNESIUM	6140		11100		mg/kg	OFS-190-9	10 / 10	-
Off-site Soil Area 190	MANGANESE	559		916		mg/kg	OFS-190-7	10 / 10	-
Off-site Soil Area 190	MERCURY	0.06	J	0.97		mg/kg	OFS-190-6	10 / 10	-
Off-site Soil Area 190	NICKEL	18.2		61.3		mg/kg	OFS-190-9	10 / 10	-
Off-site Soil Area 190	POTASSIUM	1900	J+	4050	J+	mg/kg	OFS-190-8	10 / 10	-
Off-site Soil Area 190	SELENIUM	0.83	J	1.3	J	mg/kg	OFS-190-6	3 / 10	3.5 - 3.7
Off-site Soil Area 190	SILVER	0.12	J	1.7		mg/kg	OFS-190-6	3 / 10	0.15 - 1.1
Off-site Soil Area 190	SODIUM	133	J	202	J	mg/kg	OFS-190-9	10 / 10	-
Off-site Soil Area 190	VANADIUM	37.8		49.9		mg/kg	OFS-190-9	10 / 10	-
Off-site Soil Area 190	ZINC	79.8		1330		mg/kg	OFS-190-6	10 / 10	-
Off-site Soil Area 191	ALUMINUM	11700		24100		mg/kg	OFS-191-4	10 / 10	-
Off-site Soil Area 191	ARSENIC	30.2		52.2		mg/kg	OFS-191-3	10 / 10	-
Off-site Soil Area 191	BARIUM	173		567		mg/kg	OFS-191-4	10 / 10	-
Off-site Soil Area 191	BERYLLIUM	0.52		0.76		mg/kg	OFS-191-4	6 / 10	0.43 - 0.49
Off-site Soil Area 191	CADMIUM	1.1		1.7		mg/kg	OFS-191-6	10 / 10	-
Off-site Soil Area 191	CALCIUM	3350		21900		mg/kg	OFS-191-3	10 / 10	-
Off-site Soil Area 191	CHROMIUM	22.3		37.7		mg/kg	OFS-191-3	10 / 10	-
Off-site Soil Area 191	COBALT	12.9		19.7		mg/kg	OFS-191-8	10 / 10	-
Off-site Soil Area 191	COPPER	45.9		117		mg/kg	OFS-191-6	10 / 10	-
Off-site Soil Area 191	CYANIDE	0.83	J	0.83	J	mg/kg	OFS-191-6	1 / 10	2.5 - 2.8
Off-site Soil Area 191	IRON	24700		32700		mg/kg	OFS-191-3	10 / 10	-
Off-site Soil Area 191	LEAD	11.1		27.7		mg/kg	OFS-191-6	10 / 10	-
Off-site Soil Area 191	MAGNESIUM	6040		14400		mg/kg	OFS-191-4	10 / 10	-
Off-site Soil Area 191	MANGANESE	744		1260		mg/kg	OFS-191-2	10 / 10	-
Off-site Soil Area 191	MERCURY	0.012	J	0.045	J	mg/kg	OFS-191-1	4 / 10	0.1 - 0.11
Off-site Soil Area 191	NICKEL	22.4		50.5		mg/kg	OFS-191-4	10 / 10	-
Off-site Soil Area 191	POTASSIUM	2420	J+	3740	J+	mg/kg	OFS-191-8	10 / 10	-
Off-site Soil Area 191	VANADIUM	45.6		74.9		mg/kg	OFS-191-3	10 / 10	-
Off-site Soil Area 191	ZINC	60.3		104		mg/kg	OFS-191-6	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 192	ALUMINUM	12800		21200		mg/kg	OFS-192-9	10 / 10	-
Off-site Soil Area 192	ANTIMONY	0.6	J	1.1	J	mg/kg	OFS-192-2	10 / 10	-
Off-site Soil Area 192	ARSENIC	13.5	J	45.8	J	mg/kg	OFS-192-2	10 / 10	-
Off-site Soil Area 192	BARIUM	179		313		mg/kg	OFS-192-9	10 / 10	-
Off-site Soil Area 192	BERYLLIUM	0.55		0.87		mg/kg	OFS-192-9	10 / 10	-
Off-site Soil Area 192	CADMIUM	0.2	J	1.4	J	mg/kg	OFS-192-2	10 / 10	-
Off-site Soil Area 192	CALCIUM	4180		14200		mg/kg	OFS-192-7	10 / 10	-
Off-site Soil Area 192	CHROMIUM	17.3		29.8		mg/kg	OFS-192-9	10 / 10	-
Off-site Soil Area 192	COBALT	10.4		15.3		mg/kg	OFS-192-2	10 / 10	-
Off-site Soil Area 192	COPPER	45.3		164		mg/kg	OFS-192-2	10 / 10	-
Off-site Soil Area 192	CYANIDE	0.29	J	0.33	J	mg/kg	OFS-192-2	1 / 10	2.5 - 2.7
Off-site Soil Area 192	IRON	19200		28400		mg/kg	OFS-192-9	10 / 10	-
Off-site Soil Area 192	LEAD	16.8		172		mg/kg	OFS-192-2	10 / 10	-
Off-site Soil Area 192	MAGNESIUM	4900		8110		mg/kg	OFS-192-9	10 / 10	-
Off-site Soil Area 192	MANGANESE	606		1670		mg/kg	OFS-192-1	10 / 10	-
Off-site Soil Area 192	MERCURY	0.054	J	0.28		mg/kg	OFS-192-2	10 / 10	-
Off-site Soil Area 192	NICKEL	23.3		36.2		mg/kg	OFS-192-9	10 / 10	-
Off-site Soil Area 192	POTASSIUM	2370	J+	6210	J+	mg/kg	OFS-192-2	10 / 10	-
Off-site Soil Area 192	SELENIUM	1.1	J	1.1	J	mg/kg	OFS-192-2	1 / 10	3.4 - 3.7
Off-site Soil Area 192	SILVER	0.086	J	1.1		mg/kg	OFS-192-2	10 / 10	-
Off-site Soil Area 192	SODIUM	85.5	J	188	J	mg/kg	OFS-192-7	10 / 10	-
Off-site Soil Area 192	VANADIUM	34.6		49.6		mg/kg	OFS-192-9	10 / 10	-
Off-site Soil Area 192	ZINC	77.9		413		mg/kg	OFS-192-2	10 / 10	-
Off-site Soil Area 193	ALUMINUM	9100		13600		mg/kg	OFS-193-9	10 / 10	-
Off-site Soil Area 193	ARSENIC	11.9		21.1		mg/kg	OFS-193-1	10 / 10	-
Off-site Soil Area 193	BARIUM	182		308		mg/kg	OFS-193-4	10 / 10	-
Off-site Soil Area 193	BERYLLIUM	0.52		0.62		mg/kg	OFS-193-8	6 / 10	0.47 - 0.52
Off-site Soil Area 193	CADMIUM	0.98		1.6		mg/kg	OFS-193-6	10 / 10	-
Off-site Soil Area 193	CALCIUM	5420		26700		mg/kg	OFS-193-5	10 / 10	-
Off-site Soil Area 193	CHROMIUM	16.6		24		mg/kg	OFS-193-9	10 / 10	-
Off-site Soil Area 193	COBALT	9.9		15.1		mg/kg	OFS-193-8	10 / 10	-
Off-site Soil Area 193	COPPER	58.5		233		mg/kg	OFS-193-5	10 / 10	-
Off-site Soil Area 193	CYANIDE	0.17	J	1	J	mg/kg	OFS-193-5	5 / 10	0.14 - 2.7
Off-site Soil Area 193	IRON	16900		22700		mg/kg	OFS-193-9	10 / 10	-
Off-site Soil Area 193	LEAD	15.3		58.7		mg/kg	OFS-193-9	10 / 10	-
Off-site Soil Area 193	MAGNESIUM	4990		7960		mg/kg	OFS-193-9	10 / 10	-
Off-site Soil Area 193	MANGANESE	888		2070		mg/kg	OFS-193-4	10 / 10	-
Off-site Soil Area 193	MERCURY	0.013	J	0.067	J	mg/kg	OFS-193-7	8 / 10	0.1 - 0.11
Off-site Soil Area 193	NICKEL	20.7		29.4		mg/kg	OFS-193-1	10 / 10	-
Off-site Soil Area 193	POTASSIUM	2370	J+	5400	J+	mg/kg	OFS-193-9	10 / 10	-
Off-site Soil Area 193	SELENIUM	0.21	J	0.43	J	mg/kg	OFS-193-9	3 / 10	3.5 - 3.8

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 193	SODIUM	52.8	J	385	J	mg/kg	OFS-193-1	10 / 10	-
Off-site Soil Area 193	THALLIUM	0.065	J	0.41	J	mg/kg	OFS-193-4	7 / 10	2.5 - 2.9
Off-site Soil Area 193	VANADIUM	31.2		44.7		mg/kg	OFS-193-9	10 / 10	-
Off-site Soil Area 193	ZINC	87.8		2070		mg/kg	OFS-193-5	10 / 10	-
Off-site Soil Area 194	ALUMINUM	11600		21000		mg/kg	OFS-194-3	10 / 10	-
Off-site Soil Area 194	ANTIMONY	1.4	J	2.2	J	mg/kg	OFS-194-1	8 / 10	1.7 - 6.5
Off-site Soil Area 194	ARSENIC	11.2		25.9		mg/kg	OFS-194-3	10 / 10	-
Off-site Soil Area 194	BARIUM	52.1		480		mg/kg	OFS-194-9	10 / 10	-
Off-site Soil Area 194	BERYLLIUM	0.53		0.76		mg/kg	OFS-194-7	8 / 10	0.084 - 0.45
Off-site Soil Area 194	CADMIUM	0.92		1.7		mg/kg	OFS-194-3	9 / 10	0.3 - 0.3
Off-site Soil Area 194	CALCIUM	7730		40500		mg/kg	OFS-194-1	10 / 10	-
Off-site Soil Area 194	CHROMIUM	15.1		53.9		mg/kg	OFS-194-3	10 / 10	-
Off-site Soil Area 194	COBALT	11.2		34.3		mg/kg	OFS-194-3	10 / 10	-
Off-site Soil Area 194	COPPER	27		110		mg/kg	OFS-194-3	10 / 10	-
Off-site Soil Area 194	CYANIDE	0.23	J	0.24	J	mg/kg	OFS-194-7	2 / 10	2.5 - 2.8
Off-site Soil Area 194	IRON	17200		41200		mg/kg	OFS-194-3	10 / 10	-
Off-site Soil Area 194	LEAD	6.2		58.1		mg/kg	OFS-194-4	10 / 10	-
Off-site Soil Area 194	MAGNESIUM	6090		16400		mg/kg	OFS-194-3	10 / 10	-
Off-site Soil Area 194	MANGANESE	610		1000		mg/kg	OFS-194-1	10 / 10	-
Off-site Soil Area 194	MERCURY	0.015	J	0.071	J	mg/kg	OFS-194-4	3 / 10	0.1 - 0.11
Off-site Soil Area 194	NICKEL	17.5		43.6		mg/kg	OFS-194-3	10 / 10	-
Off-site Soil Area 194	POTASSIUM	1590	J+	3730	J+	mg/kg	OFS-194-7	10 / 10	-
Off-site Soil Area 194	SELENIUM	0.19	J	0.19	J	mg/kg	OFS-194-3	1 / 10	3.5 - 3.9
Off-site Soil Area 194	SODIUM	52.1	J	1080		mg/kg	OFS-194-9	10 / 10	-
Off-site Soil Area 194	THALLIUM	0.084	J	0.15	J	mg/kg	OFS-194-4	4 / 10	2.5 - 2.8
Off-site Soil Area 194	VANADIUM	38.9		110		mg/kg	OFS-194-3	10 / 10	-
Off-site Soil Area 194	ZINC	50.6		162		mg/kg	OFS-194-5	10 / 10	-
Off-site Soil Area 195	ALUMINUM	10200		17600		mg/kg	OFS-195-3	10 / 10	-
Off-site Soil Area 195	ANTIMONY	0.3	J	1.4	J	mg/kg	OFS-195-4	6 / 10	0.32 - 7.3
Off-site Soil Area 195	ARSENIC	13.2		151		mg/kg	OFS-195-4	10 / 10	-
Off-site Soil Area 195	BARIUM	130		326		mg/kg	OFS-195-5	10 / 10	-
Off-site Soil Area 195	BERYLLIUM	0.32	J	0.91		mg/kg	OFS-195-5	10 / 10	-
Off-site Soil Area 195	CADMIUM	0.69		0.98		mg/kg	OFS-195-5	6 / 10	0.22 - 0.67
Off-site Soil Area 195	CALCIUM	4840		11900		mg/kg	OFS-195-3	10 / 10	-
Off-site Soil Area 195	CHROMIUM	12.2		26.2		mg/kg	OFS-195-8	10 / 10	-
Off-site Soil Area 195	COBALT	8.5		22.8		mg/kg	OFS-195-8	9 / 10	4.3 - 4.3
Off-site Soil Area 195	COPPER	45.2		621		mg/kg	OFS-195-4	10 / 10	-
Off-site Soil Area 195	CYANIDE	0.33	J	0.33	J	mg/kg	OFS-195-7	1 / 10	2.7 - 3.9
Off-site Soil Area 195	IRON	16200		26300		mg/kg	OFS-195-3	10 / 10	-
Off-site Soil Area 195	LEAD	19.9		350		mg/kg	OFS-195-4	10 / 10	-
Off-site Soil Area 195	MAGNESIUM	4530		10500		mg/kg	OFS-195-3	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 195	MANGANESE	218		1080		mg/kg	OFS-195-3	10 / 10	-
Off-site Soil Area 195	MERCURY	0.019	J	1.2		mg/kg	OFS-195-4	10 / 10	-
Off-site Soil Area 195	NICKEL	8.2		53.7		mg/kg	OFS-195-3	10 / 10	-
Off-site Soil Area 195	POTASSIUM	1440	J+	6280	J+	mg/kg	OFS-195-3	10 / 10	-
Off-site Soil Area 195	SELENIUM	0.49	J	4.2	J	mg/kg	OFS-195-4	5 / 10	4.3 - 5.4
Off-site Soil Area 195	SILVER	0.26	J	1.7		mg/kg	OFS-195-4	5 / 10	0.17 - 0.51
Off-site Soil Area 195	SODIUM	39	J	1110		mg/kg	OFS-195-4	10 / 10	-
Off-site Soil Area 195	THALLIUM	0.14	J	0.41	J	mg/kg	OFS-195-1	9 / 10	3.5 - 3.5
Off-site Soil Area 195	VANADIUM	31.1		55.7		mg/kg	OFS-195-5	10 / 10	-
Off-site Soil Area 195	ZINC	76.6		298		mg/kg	OFS-195-4	10 / 10	-
Off-site Soil Area 196	ALUMINUM	9020		17700		mg/kg	OFS-196-1	10 / 10	-
Off-site Soil Area 196	ANTIMONY	0.45	J	0.45	J	mg/kg	OFS-196-1	1 / 10	0.35 - 7
Off-site Soil Area 196	ARSENIC	16.8		37		mg/kg	OFS-196-2	10 / 10	-
Off-site Soil Area 196	BARIUM	139		336		mg/kg	OFS-196-3	10 / 10	-
Off-site Soil Area 196	BERYLLIUM	0.55		0.93		mg/kg	OFS-196-1	5 / 10	0.41 - 0.51
Off-site Soil Area 196	CADMIUM	0.55		1.6		mg/kg	OFS-196-2	8 / 10	0.24 - 0.43
Off-site Soil Area 196	CALCIUM	5730		25200		mg/kg	OFS-196-3	10 / 10	-
Off-site Soil Area 196	CHROMIUM	11.5		20.6		mg/kg	OFS-196-1	10 / 10	-
Off-site Soil Area 196	COBALT	7.4		14		mg/kg	OFS-196-1	10 / 10	-
Off-site Soil Area 196	COPPER	39.3		134		mg/kg	OFS-196-3	10 / 10	-
Off-site Soil Area 196	CYANIDE	0.28	J	0.72	J	mg/kg	OFS-196-4	3 / 10	2.6 - 3.9
Off-site Soil Area 196	IRON	16500		28800		mg/kg	OFS-196-1	10 / 10	-
Off-site Soil Area 196	LEAD	33.6		287		mg/kg	OFS-196-2	10 / 10	-
Off-site Soil Area 196	MAGNESIUM	4340		7800		mg/kg	OFS-196-7	10 / 10	-
Off-site Soil Area 196	MANGANESE	460		965		mg/kg	OFS-196-1	10 / 10	-
Off-site Soil Area 196	MERCURY	0.05	J	0.4		mg/kg	OFS-196-2	10 / 10	-
Off-site Soil Area 196	NICKEL	13		23.4		mg/kg	OFS-196-7	10 / 10	-
Off-site Soil Area 196	POTASSIUM	2460	J+	4790	J+	mg/kg	OFS-196-1	10 / 10	-
Off-site Soil Area 196	SELENIUM	0.47	J	1.4	J	mg/kg	OFS-196-8	8 / 10	3.6 - 5.5
Off-site Soil Area 196	SODIUM	95	J	546		mg/kg	OFS-196-3	3 / 10	70.4 - 269
Off-site Soil Area 196	THALLIUM	0.16	J	0.31	J	mg/kg	OFS-196-1	3 / 10	2.5 - 3.2
Off-site Soil Area 196	VANADIUM	30.8		61.3		mg/kg	OFS-196-1	10 / 10	-
Off-site Soil Area 196	ZINC	98		501		mg/kg	OFS-196-2	10 / 10	-
Off-site Soil Area 197	ALUMINUM	11600		18900		mg/kg	OFS-197-4	10 / 10	-
Off-site Soil Area 197	ARSENIC	8.7		22.9		mg/kg	OFS-197-8	10 / 10	-
Off-site Soil Area 197	BARIUM	136		232		mg/kg	OFS-197-1	10 / 10	-
Off-site Soil Area 197	BERYLLIUM	0.53		0.68		mg/kg	OFS-197-4	8 / 10	0.44 - 0.51
Off-site Soil Area 197	CADMIUM	1.1		1.5		mg/kg	OFS-197-4	9 / 10	0.37 - 0.37
Off-site Soil Area 197	CALCIUM	5600		15300		mg/kg	OFS-197-1	10 / 10	-
Off-site Soil Area 197	CHROMIUM	11.1		16.3		mg/kg	OFS-197-4	10 / 10	-
Off-site Soil Area 197	COBALT	10.7		16.2		mg/kg	OFS-197-4	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 197	COPPER	29.1		49.2		mg/kg	OFS-197-1	10 / 10	-
Off-site Soil Area 197	CYANIDE	0.18	J	0.21	J	mg/kg	OFS-197-1	1 / 10	2.5 - 2.8
Off-site Soil Area 197	IRON	19600		35400		mg/kg	OFS-197-4	10 / 10	-
Off-site Soil Area 197	LEAD	7.8		15.2		mg/kg	OFS-197-8	10 / 10	-
Off-site Soil Area 197	MAGNESIUM	6160		8960		mg/kg	OFS-197-4	10 / 10	-
Off-site Soil Area 197	MANGANESE	629		1070		mg/kg	OFS-197-1	10 / 10	-
Off-site Soil Area 197	MERCURY	0.014	J	0.068	J	mg/kg	OFS-197-8	5 / 10	0.1 - 0.12
Off-site Soil Area 197	NICKEL	10		14.2		mg/kg	OFS-197-1	10 / 10	-
Off-site Soil Area 197	POTASSIUM	1130	J+	3230	J+	mg/kg	OFS-197-9	10 / 10	-
Off-site Soil Area 197	SODIUM	108	J	108	J	mg/kg	OFS-197-9	1 / 10	92.1 - 509
Off-site Soil Area 197	VANADIUM	41.6		69.9		mg/kg	OFS-197-4	10 / 10	-
Off-site Soil Area 197	ZINC	52.9		511		mg/kg	OFS-197-8	10 / 10	-
Off-site Soil Area 198	ALUMINUM	7930		14600		mg/kg	OFS-198-1	10 / 10	-
Off-site Soil Area 198	ARSENIC	6.4		21.9		mg/kg	OFS-198-8	10 / 10	-
Off-site Soil Area 198	BARIUM	96.5		230		mg/kg	OFS-198-7	10 / 10	-
Off-site Soil Area 198	BERYLLIUM	0.56		0.65		mg/kg	OFS-198-1	3 / 10	0.35 - 0.53
Off-site Soil Area 198	CADMIUM	0.73		1.7		mg/kg	OFS-198-3	9 / 10	0.37 - 0.37
Off-site Soil Area 198	CALCIUM	4030		18400		mg/kg	OFS-198-6	10 / 10	-
Off-site Soil Area 198	CHROMIUM	8.4		16.8		mg/kg	OFS-198-1	10 / 10	-
Off-site Soil Area 198	COBALT	6.3		10.8		mg/kg	OFS-198-6	10 / 10	-
Off-site Soil Area 198	COPPER	18.9		171		mg/kg	OFS-198-8	10 / 10	-
Off-site Soil Area 198	CYANIDE	0.16	J	4.4		mg/kg	OFS-198-3	5 / 10	2.5 - 2.6
Off-site Soil Area 198	IRON	14700		23600		mg/kg	OFS-198-1	10 / 10	-
Off-site Soil Area 198	LEAD	5.6		113		mg/kg	OFS-198-4	10 / 10	-
Off-site Soil Area 198	MAGNESIUM	3900		7870		mg/kg	OFS-198-1	10 / 10	-
Off-site Soil Area 198	MANGANESE	442		851		mg/kg	OFS-198-9	10 / 10	-
Off-site Soil Area 198	MERCURY	0.016	J	0.2		mg/kg	OFS-198-1	7 / 10	0.1 - 0.12
Off-site Soil Area 198	NICKEL	6.5		18.7		mg/kg	OFS-198-1	10 / 10	-
Off-site Soil Area 198	POTASSIUM	1010	J+	3380	J+	mg/kg	OFS-198-3	10 / 10	-
Off-site Soil Area 198	SELENIUM	0.7	J	1.5	J	mg/kg	OFS-198-4	5 / 10	3.5 - 3.9
Off-site Soil Area 198	SODIUM	73	J	2320		mg/kg	OFS-198-1	10 / 10	-
Off-site Soil Area 198	VANADIUM	26.7		42.2		mg/kg	OFS-198-1	10 / 10	-
Off-site Soil Area 198	ZINC	45		371		mg/kg	OFS-198-4	10 / 10	-
Off-site Soil Area 199	ALUMINUM	15900		22100		mg/kg	OFS-199-7	10 / 10	-
Off-site Soil Area 199	ANTIMONY	1.1	J	1.8	J	mg/kg	OFS-199-5	5 / 10	6 - 7.3
Off-site Soil Area 199	ARSENIC	20.3	J	165	J	mg/kg	OFS-199-5	10 / 10	-
Off-site Soil Area 199	BARIUM	101		1360		mg/kg	OFS-199-3	10 / 10	-
Off-site Soil Area 199	BERYLLIUM	0.63		1.5		mg/kg	OFS-199-3	6 / 10	0.23 - 0.42
Off-site Soil Area 199	CADMIUM	0.64		2.6		mg/kg	OFS-199-6	9 / 10	0.46 - 0.46
Off-site Soil Area 199	CALCIUM	2200		43500		mg/kg	OFS-199-9	10 / 10	-
Off-site Soil Area 199	CHROMIUM	43.2		104		mg/kg	OFS-199-6	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 199	COBALT	20.2		33.9		mg/kg	OFS-199-6	10 / 10	-
Off-site Soil Area 199	COPPER	67		508		mg/kg	OFS-199-5	10 / 10	-
Off-site Soil Area 199	CYANIDE	0.18	J	0.8	J	mg/kg	OFS-199-1	3 / 10	2.5 - 2.5
Off-site Soil Area 199	IRON	18900		36000		mg/kg	OFS-199-6	10 / 10	-
Off-site Soil Area 199	LEAD	32		253		mg/kg	OFS-199-5	10 / 10	-
Off-site Soil Area 199	MAGNESIUM	8220		18000		mg/kg	OFS-199-7	10 / 10	-
Off-site Soil Area 199	MANGANESE	775		1130		mg/kg	OFS-199-4	10 / 10	-
Off-site Soil Area 199	MERCURY	0.013	J	0.28		mg/kg	OFS-199-5	10 / 10	-
Off-site Soil Area 199	NICKEL	49.4		107		mg/kg	OFS-199-3	10 / 10	-
Off-site Soil Area 199	POTASSIUM	1750	J+	5380	J+	mg/kg	OFS-199-9	10 / 10	-
Off-site Soil Area 199	SELENIUM	0.6	J-	1.8	J-	mg/kg	OFS-199-6	7 / 10	3.5 - 4.3
Off-site Soil Area 199	SILVER	1.6		1.6		mg/kg	OFS-199-5	1 / 10	0.034 - 1.2
Off-site Soil Area 199	SODIUM	167	J	167	J	mg/kg	OFS-199-9	1 / 10	32.1 - 263
Off-site Soil Area 199	THALLIUM	1.1	J	1.6	J	mg/kg	OFS-199-6	9 / 10	2.5 - 2.5
Off-site Soil Area 199	VANADIUM	51.8		81.2		mg/kg	OFS-199-7	10 / 10	-
Off-site Soil Area 199	ZINC	57.8		257		mg/kg	OFS-199-8	10 / 10	-
Off-site Soil Area 200	ALUMINUM	24200		32100		mg/kg	OFS-200-2	8 / 8	-
Off-site Soil Area 200	ANTIMONY	0.37	J	1.3	J	mg/kg	OFS-200-8	7 / 8	0.66 - 0.66
Off-site Soil Area 200	ARSENIC	12.7	J	32.1	J	mg/kg	OFS-200-6	8 / 8	-
Off-site Soil Area 200	BARIUM	68		101		mg/kg	OFS-200-9	8 / 8	-
Off-site Soil Area 200	BERYLLIUM	0.18	J	0.26	J	mg/kg	OFS-200-2	7 / 8	0.31 - 0.32
Off-site Soil Area 200	CADMIUM	0.64		0.97		mg/kg	OFS-200-9	6 / 8	0.14 - 0.28
Off-site Soil Area 200	CALCIUM	3600		6640		mg/kg	OFS-200-2	8 / 8	-
Off-site Soil Area 200	CHROMIUM	61.4		260		mg/kg	OFS-200-7	8 / 8	-
Off-site Soil Area 200	COBALT	25		34.3		mg/kg	OFS-200-9	8 / 8	-
Off-site Soil Area 200	COPPER	70.7		170		mg/kg	OFS-200-4	8 / 8	-
Off-site Soil Area 200	IRON	36300		56800		mg/kg	OFS-200-9	8 / 8	-
Off-site Soil Area 200	LEAD	15.4		45.6		mg/kg	OFS-200-6	8 / 8	-
Off-site Soil Area 200	MAGNESIUM	20200		25600		mg/kg	OFS-200-8	8 / 8	-
Off-site Soil Area 200	MANGANESE	921		1410		mg/kg	OFS-200-3	8 / 8	-
Off-site Soil Area 200	MERCURY	0.012	J	0.11		mg/kg	OFS-200-6	8 / 8	-
Off-site Soil Area 200	NICKEL	45.6		119		mg/kg	OFS-200-8	8 / 8	-
Off-site Soil Area 200	POTASSIUM	1220	J+	3450	J+	mg/kg	OFS-200-3	8 / 8	-
Off-site Soil Area 200	SELENIUM	0.59	J	2.3	J-	mg/kg	OFS-200-1	2 / 8	3.5 - 3.7
Off-site Soil Area 200	SODIUM	21.1	J	48	J	mg/kg	OFS-200-4	8 / 8	32.8 - 32.8
Off-site Soil Area 200	THALLIUM	0.13	J	1.2	J	mg/kg	OFS-200-1	4 / 8	2.5 - 2.8
Off-site Soil Area 200	VANADIUM	69.4		192		mg/kg	OFS-200-2	8 / 8	-
Off-site Soil Area 200	ZINC	80.4		124		mg/kg	OFS-200-6	8 / 8	-
Off-site Soil Area 201	ALUMINUM	16100		45500		mg/kg	OFS-201-1	10 / 10	-
Off-site Soil Area 201	ANTIMONY	0.17	J	1	J	mg/kg	OFS-201-4	9 / 10	0.3 - 6.1
Off-site Soil Area 201	ARSENIC	6		69.8		mg/kg	OFS-201-8	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 201	BARIUM	86		302		mg/kg	OFS-201-5	10 / 10	-
Off-site Soil Area 201	BERYLLIUM	0.21	J	0.4	J	mg/kg	OFS-201-6	5 / 10	0.25 - 0.4
Off-site Soil Area 201	CADMIUM	2		4.1		mg/kg	OFS-201-4	9 / 10	0.52 - 0.52
Off-site Soil Area 201	CALCIUM	3420		6800		mg/kg	OFS-201-8	10 / 10	-
Off-site Soil Area 201	CHROMIUM	31		68.4		mg/kg	OFS-201-2	10 / 10	-
Off-site Soil Area 201	COBALT	16.3		41.1		mg/kg	OFS-201-1	10 / 10	-
Off-site Soil Area 201	COPPER	56.3		362		mg/kg	OFS-201-4	10 / 10	-
Off-site Soil Area 201	CYANIDE	0.15	J	0.15	J	mg/kg	OFS-201-5	1 / 10	2.5 - 2.9
Off-site Soil Area 201	IRON	29900		85200		mg/kg	OFS-201-1	10 / 10	-
Off-site Soil Area 201	LEAD	0.77	J	89.7		mg/kg	OFS-201-4	10 / 10	-
Off-site Soil Area 201	MAGNESIUM	10700		30700		mg/kg	OFS-201-1	10 / 10	-
Off-site Soil Area 201	MANGANESE	630		5660		mg/kg	OFS-201-5	10 / 10	-
Off-site Soil Area 201	MERCURY	0.21		0.21		mg/kg	OFS-201-4	1 / 10	0.013 - 0.11
Off-site Soil Area 201	NICKEL	23.6		50.8		mg/kg	OFS-201-1	10 / 10	-
Off-site Soil Area 201	POTASSIUM	2010	J+	6110	J+	mg/kg	OFS-201-3	10 / 10	-
Off-site Soil Area 201	SELENIUM	0.56	J	0.56	J	mg/kg	OFS-201-9	1 / 10	3.5 - 3.7
Off-site Soil Area 201	SILVER	0.055	J	0.055	J	mg/kg	OFS-201-2	1 / 10	0.14 - 1.1
Off-site Soil Area 201	SODIUM	25.3	J	102	J	mg/kg	OFS-201-8	6 / 10	21.8 - 43.1
Off-site Soil Area 201	THALLIUM	0.033	J	0.82	J	mg/kg	OFS-201-5	5 / 10	2.5 - 2.9
Off-site Soil Area 201	VANADIUM	75.4		268		mg/kg	OFS-201-1	10 / 10	-
Off-site Soil Area 201	ZINC	72.8		199		mg/kg	OFS-201-2	10 / 10	-
Off-site Soil Area 202	ALUMINUM	13000		19700		mg/kg	OFS-202-2	10 / 10	-
Off-site Soil Area 202	ANTIMONY	1.2	J	2	J	mg/kg	OFS-202-1	9 / 10	1.9 - 1.9
Off-site Soil Area 202	ARSENIC	13.6		29.9		mg/kg	OFS-202-4	10 / 10	-
Off-site Soil Area 202	BARIUM	302		732		mg/kg	OFS-202-2	10 / 10	-
Off-site Soil Area 202	BERYLLIUM	0.6		0.99		mg/kg	OFS-202-2	10 / 10	-
Off-site Soil Area 202	CADMIUM	0.81		2.4		mg/kg	OFS-202-9	10 / 10	-
Off-site Soil Area 202	CALCIUM	14200		130000		mg/kg	OFS-202-1	10 / 10	-
Off-site Soil Area 202	CHROMIUM	15.1		24.4		mg/kg	OFS-202-2	10 / 10	-
Off-site Soil Area 202	COBALT	12		16.2		mg/kg	OFS-202-1	10 / 10	-
Off-site Soil Area 202	COPPER	26.9		144		mg/kg	OFS-202-4	10 / 10	-
Off-site Soil Area 202	CYANIDE	0.15	J	0.15	J	mg/kg	OFS-202-5	1 / 10	2.5 - 2.6
Off-site Soil Area 202	IRON	15200		21300		mg/kg	OFS-202-9	10 / 10	-
Off-site Soil Area 202	LEAD	6.4		134		mg/kg	OFS-202-9	10 / 10	-
Off-site Soil Area 202	MAGNESIUM	6340		11800		mg/kg	OFS-202-1	10 / 10	-
Off-site Soil Area 202	MANGANESE	590		925		mg/kg	OFS-202-6	10 / 10	-
Off-site Soil Area 202	MERCURY	0.29		0.42		mg/kg	OFS-202-4	2 / 10	0.016 - 0.1
Off-site Soil Area 202	NICKEL	31.4		65.9		mg/kg	OFS-202-1	10 / 10	-
Off-site Soil Area 202	POTASSIUM	1990	J+	4450	J+	mg/kg	OFS-202-4	10 / 10	-
Off-site Soil Area 202	SELENIUM	0.16	J	0.62	J	mg/kg	OFS-202-5	3 / 10	3.5 - 3.9
Off-site Soil Area 202	SODIUM	353	J	353	J	mg/kg	OFS-202-1	1 / 10	78.5 - 419

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 202	VANADIUM	39.7		55.1		mg/kg	OFS-202-2	10 / 10	-
Off-site Soil Area 202	ZINC	35.1		420		mg/kg	OFS-202-4	10 / 10	-
Off-site Soil Area 203	ALUMINUM	10700		30000		mg/kg	OFS-203-3	10 / 10	-
Off-site Soil Area 203	ANTIMONY	0.78	J	3.8	J	mg/kg	OFS-203-1	9 / 10	6.3 - 6.3
Off-site Soil Area 203	ARSENIC	25.3		237		mg/kg	OFS-203-1	10 / 10	-
Off-site Soil Area 203	BARIUM	316		766		mg/kg	OFS-203-2	10 / 10	-
Off-site Soil Area 203	BERYLLIUM	0.74	J	2.3	J	mg/kg	OFS-203-3	10 / 10	-
Off-site Soil Area 203	CADMIUM	1.7		9.6		mg/kg	OFS-203-3	10 / 10	-
Off-site Soil Area 203	CALCIUM	4850		18100		mg/kg	OFS-203-8	10 / 10	-
Off-site Soil Area 203	CHROMIUM	25.1		64.9		mg/kg	OFS-203-3	10 / 10	-
Off-site Soil Area 203	COBALT	13		18.4		mg/kg	OFS-203-6	10 / 10	-
Off-site Soil Area 203	COPPER	210		2270		mg/kg	OFS-203-1	10 / 10	-
Off-site Soil Area 203	CYANIDE	0.15	J	0.23	J	mg/kg	OFS-203-4	2 / 10	2.5 - 2.6
Off-site Soil Area 203	IRON	14800		25300		mg/kg	OFS-203-2	10 / 10	-
Off-site Soil Area 203	LEAD	36.9		469		mg/kg	OFS-203-1	10 / 10	-
Off-site Soil Area 203	MAGNESIUM	4420		8720		mg/kg	OFS-203-8	10 / 10	-
Off-site Soil Area 203	MANGANESE	430		1520		mg/kg	OFS-203-6	10 / 10	-
Off-site Soil Area 203	MERCURY	0.11		1.1		mg/kg	OFS-203-1	8 / 10	0.049 - 0.074
Off-site Soil Area 203	NICKEL	40.8		62.8		mg/kg	OFS-203-8	10 / 10	-
Off-site Soil Area 203	POTASSIUM	1550	J+	3220	J+	mg/kg	OFS-203-3	10 / 10	-
Off-site Soil Area 203	SELENIUM	0.36	J	3.1	J	mg/kg	OFS-203-1	5 / 10	3.5 - 4.3
Off-site Soil Area 203	SILVER	1.3		7.7		mg/kg	OFS-203-1	5 / 10	0.72 - 1
Off-site Soil Area 203	SODIUM	72	J	688		mg/kg	OFS-203-9	10 / 10	-
Off-site Soil Area 203	THALLIUM	0.14	J	0.44	J	mg/kg	OFS-203-3	9 / 10	2.6 - 2.6
Off-site Soil Area 203	VANADIUM	35.6		68.8		mg/kg	OFS-203-2	10 / 10	-
Off-site Soil Area 203	ZINC	132		1020		mg/kg	OFS-203-3	10 / 10	-
Off-site Soil Area 204	ALUMINUM	12500		19000		mg/kg	OFS-204-7	10 / 10	-
Off-site Soil Area 204	ANTIMONY	1	J	1.8	J	mg/kg	OFS-204-4	9 / 10	0.35 - 0.35
Off-site Soil Area 204	ARSENIC	13.7	J	35.3	J	mg/kg	OFS-204-6	10 / 10	-
Off-site Soil Area 204	BARIUM	164		293		mg/kg	OFS-204-5	10 / 10	-
Off-site Soil Area 204	BERYLLIUM	0.39	J	0.88		mg/kg	OFS-204-1	10 / 10	-
Off-site Soil Area 204	CADMIUM	0.94		2.6		mg/kg	OFS-204-8	10 / 10	-
Off-site Soil Area 204	CALCIUM	6510		15800		mg/kg	OFS-204-4	10 / 10	-
Off-site Soil Area 204	CHROMIUM	23.9		34.8		mg/kg	OFS-204-4	10 / 10	-
Off-site Soil Area 204	COBALT	12.5		18.5		mg/kg	OFS-204-8	10 / 10	-
Off-site Soil Area 204	COPPER	39.8		230		mg/kg	OFS-204-8	10 / 10	-
Off-site Soil Area 204	CYANIDE	0.22	J	0.61	J	mg/kg	OFS-204-4	3 / 10	0.15 - 2.7
Off-site Soil Area 204	IRON	21500		30500		mg/kg	OFS-204-7	10 / 10	-
Off-site Soil Area 204	LEAD	12.2		56		mg/kg	OFS-204-1	10 / 10	-
Off-site Soil Area 204	MAGNESIUM	7210		10400		mg/kg	OFS-204-1	10 / 10	-
Off-site Soil Area 204	MANGANESE	1030		1570		mg/kg	OFS-204-7	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 204	MERCURY	0.024	J	0.12		mg/kg	OFS-204-7	10 / 10	-
Off-site Soil Area 204	NICKEL	23.3		36.2		mg/kg	OFS-204-1	10 / 10	-
Off-site Soil Area 204	POTASSIUM	2010	J+	4450	J+	mg/kg	OFS-204-4	10 / 10	-
Off-site Soil Area 204	SELENIUM	0.38	J	0.38	J	mg/kg	OFS-204-4	1 / 10	3.5 - 4.1
Off-site Soil Area 204	SODIUM	196	J	196	J	mg/kg	OFS-204-9	1 / 10	51.7 - 324
Off-site Soil Area 204	THALLIUM	0.18	J	0.18	J	mg/kg	OFS-204-1	1 / 10	2.5 - 2.7
Off-site Soil Area 204	VANADIUM	45.5		76		mg/kg	OFS-204-8	10 / 10	-
Off-site Soil Area 204	ZINC	51.1		650		mg/kg	OFS-204-4	10 / 10	-
Off-site Soil Area 205	ALUMINUM	11000		22000		mg/kg	OFS-205-1	10 / 10	-
Off-site Soil Area 205	ANTIMONY	1	J	1.8	J	mg/kg	OFS-205-1	9 / 10	0.33 - 0.33
Off-site Soil Area 205	ARSENIC	16.3	J	39.8	J	mg/kg	OFS-205-5	10 / 10	-
Off-site Soil Area 205	BARIUM	225		358		mg/kg	OFS-205-1	10 / 10	-
Off-site Soil Area 205	BERYLLIUM	0.52		0.83		mg/kg	OFS-205-1	7 / 10	0.45 - 0.48
Off-site Soil Area 205	CADMIUM	0.73		2.7		mg/kg	OFS-205-3	10 / 10	-
Off-site Soil Area 205	CALCIUM	6420		30400		mg/kg	OFS-205-9	10 / 10	-
Off-site Soil Area 205	CHROMIUM	22.3		38.4		mg/kg	OFS-205-1	10 / 10	-
Off-site Soil Area 205	COBALT	12.4		18.4		mg/kg	OFS-205-1	10 / 10	-
Off-site Soil Area 205	COPPER	77		423		mg/kg	OFS-205-5	10 / 10	-
Off-site Soil Area 205	CYANIDE	0.3	J	0.3	J	mg/kg	OFS-205-8	1 / 10	0.14 - 2.6
Off-site Soil Area 205	IRON	21800		30500		mg/kg	OFS-205-1	10 / 10	-
Off-site Soil Area 205	LEAD	19		76.6		mg/kg	OFS-205-3	10 / 10	-
Off-site Soil Area 205	MAGNESIUM	6370		11800		mg/kg	OFS-205-1	10 / 10	-
Off-site Soil Area 205	MANGANESE	1130		1580		mg/kg	OFS-205-1	10 / 10	-
Off-site Soil Area 205	MERCURY	0.02	J	0.11		mg/kg	OFS-205-3	10 / 10	-
Off-site Soil Area 205	NICKEL	22.8		41.7		mg/kg	OFS-205-1	10 / 10	-
Off-site Soil Area 205	POTASSIUM	2300	J+	3880	J+	mg/kg	OFS-205-1	10 / 10	-
Off-site Soil Area 205	SODIUM	124	J	124	J	mg/kg	OFS-205-9	1 / 10	55.3 - 191
Off-site Soil Area 205	THALLIUM	0.12	J	0.12	J	mg/kg	OFS-205-2	1 / 10	2.5 - 3
Off-site Soil Area 205	VANADIUM	44.9		66.8		mg/kg	OFS-205-1	10 / 10	-
Off-site Soil Area 205	ZINC	105		489		mg/kg	OFS-205-3	10 / 10	-
Off-site Soil Area 206	ALUMINUM	9400		11600		mg/kg	OFS-206-3	10 / 10	-
Off-site Soil Area 206	ANTIMONY	1.2	J	1.6	J	mg/kg	OFS-206-4	9 / 10	0.38 - 0.38
Off-site Soil Area 206	ARSENIC	16.7		26.5		mg/kg	OFS-206-1	10 / 10	-
Off-site Soil Area 206	BARIUM	118	J	159	J	mg/kg	OFS-206-7	10 / 10	-
Off-site Soil Area 206	BERYLLIUM	0.39	J	0.51	J	mg/kg	OFS-206-7	8 / 10	0.42 - 0.46
Off-site Soil Area 206	CADMIUM	1.1		2.6		mg/kg	OFS-206-7	10 / 10	-
Off-site Soil Area 206	CALCIUM	5550		8930		mg/kg	OFS-206-8	10 / 10	-
Off-site Soil Area 206	CHROMIUM	11.8		17.2		mg/kg	OFS-206-4	10 / 10	-
Off-site Soil Area 206	COBALT	9.6		11.5		mg/kg	OFS-206-1	10 / 10	-
Off-site Soil Area 206	COPPER	53.6		293		mg/kg	OFS-206-7	10 / 10	-
Off-site Soil Area 206	CYANIDE	0.15	J	0.38	J	mg/kg	OFS-206-7	2 / 10	0.15 - 2.5

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 206	IRON	16300		20900		mg/kg	OFS-206-1	10 / 10	-
Off-site Soil Area 206	LEAD	28.2		64.2		mg/kg	OFS-206-7	10 / 10	-
Off-site Soil Area 206	MAGNESIUM	4850		5860		mg/kg	OFS-206-1	10 / 10	-
Off-site Soil Area 206	MANGANESE	587	J	763	J	mg/kg	OFS-206-1	10 / 10	-
Off-site Soil Area 206	MERCURY	0.098	J	0.2		mg/kg	OFS-206-6	9 / 10	0.1 - 0.1
Off-site Soil Area 206	NICKEL	12.9		15.9		mg/kg	OFS-206-1	10 / 10	-
Off-site Soil Area 206	POTASSIUM	3440	J+	4520	J+	mg/kg	OFS-206-5	10 / 10	-
Off-site Soil Area 206	SILVER	0.051	J	0.42	J	mg/kg	OFS-206-6	6 / 10	0.39 - 1.1
Off-site Soil Area 206	SODIUM	40.5	J	81.1	J	mg/kg	OFS-206-8	10 / 10	-
Off-site Soil Area 206	THALLIUM	0.043	J	0.076	J	mg/kg	OFS-206-6	4 / 10	0.038 - 2.9
Off-site Soil Area 206	VANADIUM	27.4		38.6		mg/kg	OFS-206-1	10 / 10	-
Off-site Soil Area 206	ZINC	104		220		mg/kg	OFS-206-7	10 / 10	-
Off-site Soil Area 207	ALUMINUM	12000		16100		mg/kg	OFS-207-1	10 / 10	-
Off-site Soil Area 207	ANTIMONY	0.87	J	1.9	J	mg/kg	OFS-207-1	9 / 10	0.32 - 0.32
Off-site Soil Area 207	ARSENIC	6.9		35.6		mg/kg	OFS-207-8	10 / 10	-
Off-site Soil Area 207	BARIUM	105		277	J	mg/kg	OFS-207-4	10 / 10	-
Off-site Soil Area 207	BERYLLIUM	0.57	J	0.87	J	mg/kg	OFS-207-4	4 / 10	0.38 - 0.54
Off-site Soil Area 207	CADMIUM	0.81		1.9		mg/kg	OFS-207-1	9 / 10	0.43 - 0.43
Off-site Soil Area 207	CALCIUM	5550		47000		mg/kg	OFS-207-4	10 / 10	-
Off-site Soil Area 207	CHROMIUM	13.4		23.3		mg/kg	OFS-207-4	10 / 10	-
Off-site Soil Area 207	COBALT	9.4		16.1		mg/kg	OFS-207-1	10 / 10	-
Off-site Soil Area 207	COPPER	41.9		173		mg/kg	OFS-207-1	10 / 10	-
Off-site Soil Area 207	IRON	17300		30300		mg/kg	OFS-207-8	10 / 10	-
Off-site Soil Area 207	LEAD	13.1		46.7		mg/kg	OFS-207-6	10 / 10	-
Off-site Soil Area 207	MAGNESIUM	5540		8950		mg/kg	OFS-207-3	10 / 10	-
Off-site Soil Area 207	MANGANESE	543	J	889	J	mg/kg	OFS-207-1	10 / 10	-
Off-site Soil Area 207	MERCURY	0.19		0.22		mg/kg	OFS-207-8	2 / 10	0.036 - 0.14
Off-site Soil Area 207	NICKEL	11.6		50.1		mg/kg	OFS-207-4	10 / 10	-
Off-site Soil Area 207	POTASSIUM	1570	J+	3460	J+	mg/kg	OFS-207-6	10 / 10	-
Off-site Soil Area 207	SILVER	0.17	J	0.17	J	mg/kg	OFS-207-1	1 / 10	1 - 1.5
Off-site Soil Area 207	SODIUM	61.4	J	200	J	mg/kg	OFS-207-6	10 / 10	-
Off-site Soil Area 207	THALLIUM	0.087	J	0.13	J	mg/kg	OFS-207-8	3 / 10	2.6 - 3.7
Off-site Soil Area 207	VANADIUM	37.8		59.2		mg/kg	OFS-207-3	10 / 10	-
Off-site Soil Area 207	ZINC	51.8		201		mg/kg	OFS-207-3	10 / 10	-
Off-site Soil Area 208	ALUMINUM	8260		19600		mg/kg	OFS-208-1	10 / 10	-
Off-site Soil Area 208	ANTIMONY	0.99	J	4.7	J	mg/kg	OFS-208-3	9 / 10	0.31 - 0.31
Off-site Soil Area 208	ARSENIC	13.2		817		mg/kg	OFS-208-3	10 / 10	-
Off-site Soil Area 208	BARIUM	147		299		mg/kg	OFS-208-3	10 / 10	-
Off-site Soil Area 208	BERYLLIUM	0.56		0.7		mg/kg	OFS-208-7	3 / 10	0.39 - 0.84
Off-site Soil Area 208	CADMIUM	0.65		8.2		mg/kg	OFS-208-3	9 / 10	0.38 - 0.38
Off-site Soil Area 208	CALCIUM	3920		11200		mg/kg	OFS-208-6	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 208	CHROMIUM	9.4		25.2		mg/kg	OFS-208-3	10 / 10	-
Off-site Soil Area 208	COBALT	6.7		15.5		mg/kg	OFS-208-1	10 / 10	-
Off-site Soil Area 208	COPPER	26		122		mg/kg	OFS-208-3	10 / 10	-
Off-site Soil Area 208	CYANIDE	0.16	J	0.66	J	mg/kg	OFS-208-1	5 / 10	2.5 - 2.6
Off-site Soil Area 208	IRON	12500		50900		mg/kg	OFS-208-3	10 / 10	-
Off-site Soil Area 208	LEAD	14.5		576		mg/kg	OFS-208-3	10 / 10	-
Off-site Soil Area 208	MAGNESIUM	4530		9850		mg/kg	OFS-208-1	10 / 10	-
Off-site Soil Area 208	MANGANESE	386		916		mg/kg	OFS-208-1	10 / 10	-
Off-site Soil Area 208	MERCURY	0.026	J	2.7	J+	mg/kg	OFS-208-3	10 / 10	-
Off-site Soil Area 208	NICKEL	10		21.8		mg/kg	OFS-208-3	10 / 10	-
Off-site Soil Area 208	POTASSIUM	2200	J+	6110	J+	mg/kg	OFS-208-1	10 / 10	-
Off-site Soil Area 208	SELENIUM	5.5		5.5		mg/kg	OFS-208-3	1 / 10	3.6 - 6.6
Off-site Soil Area 208	SILVER	0.16	J	3		mg/kg	OFS-208-3	2 / 10	0.11 - 1.9
Off-site Soil Area 208	SODIUM	32.4	J	360	J	mg/kg	OFS-208-1	10 / 10	-
Off-site Soil Area 208	THALLIUM	0.086	J	0.43	J	mg/kg	OFS-208-1	8 / 10	2.6 - 2.7
Off-site Soil Area 208	VANADIUM	24.4		66.9		mg/kg	OFS-208-1	10 / 10	-
Off-site Soil Area 208	ZINC	65.8		1740		mg/kg	OFS-208-3	10 / 10	-
Off-site Soil Area 209	ALUMINUM	11500		14400		mg/kg	OFS-209-5	10 / 10	-
Off-site Soil Area 209	ANTIMONY	1	J	1	J	mg/kg	OFS-209-1	1 / 10	0.92 - 6.3
Off-site Soil Area 209	ARSENIC	9.4		33		mg/kg	OFS-209-8	10 / 10	-
Off-site Soil Area 209	BARIUM	107		194		mg/kg	OFS-209-9	10 / 10	-
Off-site Soil Area 209	BERYLLIUM	0.55		0.6		mg/kg	OFS-209-8	6 / 10	0.37 - 0.54
Off-site Soil Area 209	CADMIUM	0.59		1.2		mg/kg	OFS-209-8	9 / 10	0.28 - 0.28
Off-site Soil Area 209	CALCIUM	5430		12900		mg/kg	OFS-209-2	10 / 10	-
Off-site Soil Area 209	CHROMIUM	10.8		20.2		mg/kg	OFS-209-1	10 / 10	-
Off-site Soil Area 209	COBALT	8.7		12.5		mg/kg	OFS-209-1	10 / 10	-
Off-site Soil Area 209	COPPER	25		79.9		mg/kg	OFS-209-2	10 / 10	-
Off-site Soil Area 209	CYANIDE	0.2	J	0.2	J	mg/kg	OFS-209-8	1 / 10	2.5 - 2.6
Off-site Soil Area 209	IRON	16500		29500		mg/kg	OFS-209-1	10 / 10	-
Off-site Soil Area 209	LEAD	7.4		34.9		mg/kg	OFS-209-8	10 / 10	-
Off-site Soil Area 209	MAGNESIUM	5460		6850		mg/kg	OFS-209-5	10 / 10	-
Off-site Soil Area 209	MANGANESE	507		691		mg/kg	OFS-209-5	10 / 10	-
Off-site Soil Area 209	MERCURY	0.012	J+	0.12	J+	mg/kg	OFS-209-8	8 / 10	0.1 - 0.12
Off-site Soil Area 209	NICKEL	8.4		17.1		mg/kg	OFS-209-1	10 / 10	-
Off-site Soil Area 209	POTASSIUM	1130	J+	3300	J+	mg/kg	OFS-209-7	10 / 10	-
Off-site Soil Area 209	SODIUM	53	J	145	J	mg/kg	OFS-209-1	10 / 10	-
Off-site Soil Area 209	THALLIUM	0.061	J	0.37	J	mg/kg	OFS-209-1	8 / 10	2.6 - 2.6
Off-site Soil Area 209	VANADIUM	31.2		49.3		mg/kg	OFS-209-4	10 / 10	-
Off-site Soil Area 209	ZINC	58.5		389		mg/kg	OFS-209-1	10 / 10	-
Off-site Soil Area 210	ALUMINUM	9190		13300		mg/kg	OFS-210-6	10 / 10	-
Off-site Soil Area 210	ARSENIC	13.8		42.9		mg/kg	OFS-210-1	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 210	BARIUM	149		212		mg/kg	OFS-210-4	10 / 10	-
Off-site Soil Area 210	BERYLLIUM	0.37	J	0.61	J	mg/kg	OFS-210-4	9 / 10	0.47 - 0.47
Off-site Soil Area 210	CADMIUM	0.6		1.2		mg/kg	OFS-210-8	10 / 10	-
Off-site Soil Area 210	CALCIUM	5840		16500		mg/kg	OFS-210-6	10 / 10	-
Off-site Soil Area 210	CHROMIUM	10.1		19.1		mg/kg	OFS-210-9	10 / 10	-
Off-site Soil Area 210	COBALT	7		11.1		mg/kg	OFS-210-2	10 / 10	-
Off-site Soil Area 210	COPPER	27.7		45.6		mg/kg	OFS-210-8	10 / 10	-
Off-site Soil Area 210	CYANIDE	0.17	J	0.22	J	mg/kg	OFS-210-9	2 / 10	2.5 - 2.5
Off-site Soil Area 210	IRON	13500		21800		mg/kg	OFS-210-2	10 / 10	-
Off-site Soil Area 210	LEAD	8		41		mg/kg	OFS-210-1	10 / 10	-
Off-site Soil Area 210	MAGNESIUM	4990		7130		mg/kg	OFS-210-6	10 / 10	-
Off-site Soil Area 210	MANGANESE	501		946		mg/kg	OFS-210-4	10 / 10	-
Off-site Soil Area 210	MERCURY	0.022	J	0.15		mg/kg	OFS-210-1	9 / 10	0.1 - 0.1
Off-site Soil Area 210	NICKEL	11.6		22.9		mg/kg	OFS-210-8	10 / 10	-
Off-site Soil Area 210	POTASSIUM	1750	J+	3850	J+	mg/kg	OFS-210-9	10 / 10	-
Off-site Soil Area 210	SODIUM	36.1	J	106	J	mg/kg	OFS-210-3	10 / 10	-
Off-site Soil Area 210	THALLIUM	0.073	J	0.25	J	mg/kg	OFS-210-5	7 / 10	2.6 - 2.6
Off-site Soil Area 210	VANADIUM	25.2		41.5		mg/kg	OFS-210-2	10 / 10	-
Off-site Soil Area 210	ZINC	52.8		252		mg/kg	OFS-210-3	10 / 10	-
Off-site Soil Area 211	ALUMINUM	8940		17800		mg/kg	OFS-211-9	10 / 10	-
Off-site Soil Area 211	ANTIMONY	0.82	J	1.7	J	mg/kg	OFS-211-2	8 / 10	1.3 - 9.3
Off-site Soil Area 211	ARSENIC	10.6		35.7		mg/kg	OFS-211-2	10 / 10	-
Off-site Soil Area 211	BARIUM	110		294		mg/kg	OFS-211-9	10 / 10	-
Off-site Soil Area 211	BERYLLIUM	0.47	J	0.9		mg/kg	OFS-211-9	6 / 10	0.3 - 0.5
Off-site Soil Area 211	CADMIUM	0.78		3.2		mg/kg	OFS-211-2	9 / 10	0.67 - 0.67
Off-site Soil Area 211	CALCIUM	4490		21500		mg/kg	OFS-211-1	10 / 10	-
Off-site Soil Area 211	CHROMIUM	10.2		17.8		mg/kg	OFS-211-2	10 / 10	-
Off-site Soil Area 211	COBALT	8.3		12		mg/kg	OFS-211-9	10 / 10	-
Off-site Soil Area 211	COPPER	27.5		154		mg/kg	OFS-211-2	10 / 10	-
Off-site Soil Area 211	CYANIDE	0.17	J	0.22	J	mg/kg	OFS-211-8	3 / 10	0.14 - 3.9
Off-site Soil Area 211	IRON	16900		24300		mg/kg	OFS-211-9	10 / 10	-
Off-site Soil Area 211	LEAD	11.4		253		mg/kg	OFS-211-2	10 / 10	-
Off-site Soil Area 211	MAGNESIUM	4600		8190		mg/kg	OFS-211-9	10 / 10	-
Off-site Soil Area 211	MANGANESE	386		813		mg/kg	OFS-211-9	10 / 10	-
Off-site Soil Area 211	MERCURY	0.012	J	0.11		mg/kg	OFS-211-2	10 / 10	-
Off-site Soil Area 211	NICKEL	9.1		18.5		mg/kg	OFS-211-2	10 / 10	-
Off-site Soil Area 211	POTASSIUM	1640	J+	5370	J+	mg/kg	OFS-211-9	10 / 10	-
Off-site Soil Area 211	SODIUM	40.9	J	131	J	mg/kg	OFS-211-1	10 / 10	-
Off-site Soil Area 211	VANADIUM	32.4		49.2		mg/kg	OFS-211-1	10 / 10	-
Off-site Soil Area 211	ZINC	53.9		592		mg/kg	OFS-211-2	10 / 10	-
Off-site Soil Area 212	ALUMINUM	12400		15600		mg/kg	OFS-212-4	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 212	ARSENIC	9.8		16.1	J	mg/kg	OFS-212-8	10 / 10	-
Off-site Soil Area 212	BARIUM	180		242		mg/kg	OFS-212-4	10 / 10	-
Off-site Soil Area 212	BERYLLIUM	0.57		0.72		mg/kg	OFS-212-4	10 / 10	-
Off-site Soil Area 212	CALCIUM	6050		11800		mg/kg	OFS-212-8	10 / 10	-
Off-site Soil Area 212	CHROMIUM	13.4		18.8		mg/kg	OFS-212-4	10 / 10	-
Off-site Soil Area 212	COBALT	8.5		10.8		mg/kg	OFS-212-4	10 / 10	-
Off-site Soil Area 212	COPPER	24.1		29.4	J	mg/kg	OFS-212-4	10 / 10	-
Off-site Soil Area 212	CYANIDE	0.52	J	0.52	J	mg/kg	OFS-212-3	1 / 10	2.5 - 3
Off-site Soil Area 212	IRON	18300		22400		mg/kg	OFS-212-4	10 / 10	-
Off-site Soil Area 212	LEAD	8.4	J	28.2	J	mg/kg	OFS-212-8	10 / 10	-
Off-site Soil Area 212	MAGNESIUM	5860		7190		mg/kg	OFS-212-3	10 / 10	-
Off-site Soil Area 212	MANGANESE	494		683		mg/kg	OFS-212-9	10 / 10	-
Off-site Soil Area 212	MERCURY	0.017	J	0.023	J	mg/kg	OFS-212-1	5 / 10	0.1 - 0.12
Off-site Soil Area 212	NICKEL	13.6		19.3		mg/kg	OFS-212-4	10 / 10	-
Off-site Soil Area 212	POTASSIUM	1380	J+	3970	J+	mg/kg	OFS-212-3	10 / 10	-
Off-site Soil Area 212	SELENIUM	0.36	J	0.65	J	mg/kg	OFS-212-4	6 / 10	3.6 - 4.3
Off-site Soil Area 212	SODIUM	49.4	J	469	J	mg/kg	OFS-212-3	10 / 10	-
Off-site Soil Area 212	THALLIUM	0.24	J	0.45	J	mg/kg	OFS-212-4	9 / 10	3 - 3
Off-site Soil Area 212	VANADIUM	34.1		43.3		mg/kg	OFS-212-4	10 / 10	-
Off-site Soil Area 212	ZINC	43.1		719		mg/kg	OFS-212-3	10 / 10	-
Off-site Soil Area 213	ALUMINUM	7790		14500		mg/kg	OFS-213-1	10 / 10	-
Off-site Soil Area 213	ANTIMONY	0.4	J	2.4	J	mg/kg	OFS-213-6	8 / 10	2 - 6.9
Off-site Soil Area 213	ARSENIC	19.1		66.4		mg/kg	OFS-213-1	10 / 10	-
Off-site Soil Area 213	BARIUM	108		339		mg/kg	OFS-213-1	10 / 10	-
Off-site Soil Area 213	BERYLLIUM	0.52		0.81		mg/kg	OFS-213-1	5 / 10	0.3 - 0.52
Off-site Soil Area 213	CADMIUM	0.62		3		mg/kg	OFS-213-9	7 / 10	0.31 - 0.48
Off-site Soil Area 213	CALCIUM	4720		34000		mg/kg	OFS-213-6	10 / 10	-
Off-site Soil Area 213	CHROMIUM	13.2		28.3		mg/kg	OFS-213-6	10 / 10	-
Off-site Soil Area 213	COBALT	7.6		13.8		mg/kg	OFS-213-1	10 / 10	-
Off-site Soil Area 213	COPPER	59.1		199		mg/kg	OFS-213-5	10 / 10	-
Off-site Soil Area 213	CYANIDE	0.17	J	0.69	J	mg/kg	OFS-213-7	7 / 10	2.5 - 2.5
Off-site Soil Area 213	IRON	14100		27000		mg/kg	OFS-213-7	10 / 10	-
Off-site Soil Area 213	LEAD	48.4		343		mg/kg	OFS-213-6	10 / 10	-
Off-site Soil Area 213	MAGNESIUM	4630		8020		mg/kg	OFS-213-5	10 / 10	-
Off-site Soil Area 213	MANGANESE	383		1450		mg/kg	OFS-213-1	10 / 10	-
Off-site Soil Area 213	MERCURY	0.048	J	0.39		mg/kg	OFS-213-9	10 / 10	-
Off-site Soil Area 213	NICKEL	16.2		35.7		mg/kg	OFS-213-6	10 / 10	-
Off-site Soil Area 213	POTASSIUM	1920	J+	4700	J+	mg/kg	OFS-213-5	10 / 10	-
Off-site Soil Area 213	SELENIUM	0.23	J	5.2		mg/kg	OFS-213-7	6 / 10	3.5 - 4
Off-site Soil Area 213	SILVER	0.26	J	0.78	J	mg/kg	OFS-213-5	6 / 10	0.27 - 0.93
Off-site Soil Area 213	SODIUM	51.6	J	982	J	mg/kg	OFS-213-1	9 / 10	156 - 156

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 213	THALLIUM	0.2	J	0.2	J	mg/kg	OFS-213-1	1 / 10	2.5 - 2.8
Off-site Soil Area 213	VANADIUM	29.5		46.6		mg/kg	OFS-213-1	10 / 10	-
Off-site Soil Area 213	ZINC	101		584		mg/kg	OFS-213-9	10 / 10	-
Off-site Soil Area 214	ALUMINUM	8670		14500		mg/kg	OFS-214-4	10 / 10	-
Off-site Soil Area 214	ANTIMONY	0.33	J	0.82	J	mg/kg	OFS-214-4	7 / 10	2 - 6.7
Off-site Soil Area 214	ARSENIC	17		51.6		mg/kg	OFS-214-1	10 / 10	-
Off-site Soil Area 214	BARIUM	146		238		mg/kg	OFS-214-4	10 / 10	-
Off-site Soil Area 214	BERYLLIUM	0.53		0.56		mg/kg	OFS-214-7	3 / 10	0.32 - 0.58
Off-site Soil Area 214	CADMIUM	0.59		2.9		mg/kg	OFS-214-8	8 / 10	0.12 - 0.4
Off-site Soil Area 214	CALCIUM	13400		43500		mg/kg	OFS-214-9	10 / 10	-
Off-site Soil Area 214	CHROMIUM	11.1		19.6		mg/kg	OFS-214-4	10 / 10	-
Off-site Soil Area 214	COBALT	8.9		14.1		mg/kg	OFS-214-4	10 / 10	-
Off-site Soil Area 214	COPPER	27.1		104		mg/kg	OFS-214-7	10 / 10	-
Off-site Soil Area 214	CYANIDE	0.17	J	0.21	J	mg/kg	OFS-214-4	2 / 10	2.5 - 2.5
Off-site Soil Area 214	IRON	16000		24900		mg/kg	OFS-214-4	10 / 10	-
Off-site Soil Area 214	LEAD	11		274		mg/kg	OFS-214-8	10 / 10	-
Off-site Soil Area 214	MAGNESIUM	5390		8250		mg/kg	OFS-214-4	10 / 10	-
Off-site Soil Area 214	MANGANESE	552		1000		mg/kg	OFS-214-4	10 / 10	-
Off-site Soil Area 214	MERCURY	0.11		0.63		mg/kg	OFS-214-2	9 / 10	0.012 - 0.012
Off-site Soil Area 214	NICKEL	13.8		26.3		mg/kg	OFS-214-1	10 / 10	-
Off-site Soil Area 214	POTASSIUM	1820	J+	7090	J+	mg/kg	OFS-214-4	10 / 10	-
Off-site Soil Area 214	SELENIUM	0.36	J	45.8		mg/kg	OFS-214-8	8 / 10	3.6 - 3.9
Off-site Soil Area 214	SILVER	0.14	J	0.91	J	mg/kg	OFS-214-7	10 / 10	-
Off-site Soil Area 214	SODIUM	24.2	J	104	J	mg/kg	OFS-214-4	9 / 10	59.4 - 59.4
Off-site Soil Area 214	VANADIUM	26.5		45.5		mg/kg	OFS-214-4	10 / 10	-
Off-site Soil Area 214	ZINC	47.2		444		mg/kg	OFS-214-2	10 / 10	-
Off-site Soil Area 215	ALUMINUM	6830		11900		mg/kg	OFS-215-9	10 / 10	-
Off-site Soil Area 215	ANTIMONY	0.97	J	1.3	J	mg/kg	OFS-215-1	4 / 10	1.2 - 6.1
Off-site Soil Area 215	ARSENIC	17.7	J	441		mg/kg	OFS-215-9	10 / 10	-
Off-site Soil Area 215	BARIUM	54.3		179		mg/kg	OFS-215-2	10 / 10	-
Off-site Soil Area 215	CADMIUM	0.76		4.2		mg/kg	OFS-215-9	10 / 10	-
Off-site Soil Area 215	CALCIUM	5670		14200		mg/kg	OFS-215-2	10 / 10	-
Off-site Soil Area 215	CHROMIUM	7.5		15.3		mg/kg	OFS-215-9	10 / 10	-
Off-site Soil Area 215	COBALT	6.7		11		mg/kg	OFS-215-6	10 / 10	-
Off-site Soil Area 215	COPPER	21.7		87.5		mg/kg	OFS-215-9	10 / 10	-
Off-site Soil Area 215	CYANIDE	0.17	J	0.17	J	mg/kg	OFS-215-9	1 / 10	2.5 - 2.5
Off-site Soil Area 215	IRON	13500		38900		mg/kg	OFS-215-9	10 / 10	-
Off-site Soil Area 215	LEAD	18.3		515		mg/kg	OFS-215-9	10 / 10	-
Off-site Soil Area 215	MAGNESIUM	4090		5570		mg/kg	OFS-215-9	10 / 10	-
Off-site Soil Area 215	MANGANESE	351		660		mg/kg	OFS-215-2	10 / 10	-
Off-site Soil Area 215	MERCURY	0.11		4.1		mg/kg	OFS-215-9	9 / 10	0.031 - 0.078

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 215	NICKEL	7		16		mg/kg	OFS-215-2	10 / 10	-
Off-site Soil Area 215	POTASSIUM	1170	J+	3080	J+	mg/kg	OFS-215-9	10 / 10	-
Off-site Soil Area 215	SELENIUM	0.35	J	5.2		mg/kg	OFS-215-9	4 / 10	3.5 - 4
Off-site Soil Area 215	SILVER	3.3		3.3		mg/kg	OFS-215-9	1 / 10	0.11 - 1.1
Off-site Soil Area 215	SODIUM	44	J	647		mg/kg	OFS-215-9	10 / 10	-
Off-site Soil Area 215	THALLIUM	0.058	J	0.25	J	mg/kg	OFS-215-8	6 / 10	2.5 - 2.8
Off-site Soil Area 215	VANADIUM	24.7		50.5		mg/kg	OFS-215-9	10 / 10	-
Off-site Soil Area 215	ZINC	110		914		mg/kg	OFS-215-9	10 / 10	-
Off-site Soil Area 216	ALUMINUM	9390	J	13700	J	mg/kg	OFS-216-4	10 / 10	-
Off-site Soil Area 216	ANTIMONY	0.89	J	1.6	J	mg/kg	OFS-216-4	9 / 10	0.39 - 0.39
Off-site Soil Area 216	ARSENIC	11	J	31.9	J	mg/kg	OFS-216-1	10 / 10	-
Off-site Soil Area 216	BARIUM	106	J	214	J	mg/kg	OFS-216-8	10 / 10	-
Off-site Soil Area 216	BERYLLIUM	0.54		0.61		mg/kg	OFS-216-7	6 / 10	0.33 - 0.49
Off-site Soil Area 216	CADMIUM	0.9		1.3		mg/kg	OFS-216-3	9 / 10	0.32 - 0.32
Off-site Soil Area 216	CALCIUM	5740		32300	J	mg/kg	OFS-216-1	10 / 10	-
Off-site Soil Area 216	CHROMIUM	13.5	J	22.3	J	mg/kg	OFS-216-4	10 / 10	-
Off-site Soil Area 216	COBALT	8.8		12.2		mg/kg	OFS-216-4	10 / 10	-
Off-site Soil Area 216	COPPER	35.4	J	76.4	J	mg/kg	OFS-216-3	10 / 10	-
Off-site Soil Area 216	CYANIDE	0.18	J	1.1	J	mg/kg	OFS-216-1	1 / 10	2.5 - 2.6
Off-site Soil Area 216	IRON	18200		22800		mg/kg	OFS-216-4	10 / 10	-
Off-site Soil Area 216	LEAD	15.3	J	39	J	mg/kg	OFS-216-9	10 / 10	-
Off-site Soil Area 216	MAGNESIUM	5230		6570		mg/kg	OFS-216-4	10 / 10	-
Off-site Soil Area 216	MANGANESE	487		757		mg/kg	OFS-216-3	10 / 10	-
Off-site Soil Area 216	MERCURY	0.092	J	0.53		mg/kg	OFS-216-5	2 / 10	0.022 - 0.099
Off-site Soil Area 216	NICKEL	12.2		19.4		mg/kg	OFS-216-4	10 / 10	-
Off-site Soil Area 216	POTASSIUM	1770	J+	4050	J+	mg/kg	OFS-216-3	10 / 10	-
Off-site Soil Area 216	SELENIUM	0.43	J	0.43	J	mg/kg	OFS-216-9	1 / 10	3.5 - 4
Off-site Soil Area 216	SILVER	0.51	J	0.63	J	mg/kg	OFS-216-8	2 / 10	0.11 - 1.1
Off-site Soil Area 216	SODIUM	59.3	J	490	J	mg/kg	OFS-216-4	10 / 10	-
Off-site Soil Area 216	THALLIUM	0.33	J	0.33	J	mg/kg	OFS-216-9	1 / 10	2.5 - 2.8
Off-site Soil Area 216	VANADIUM	35.6		50.2		mg/kg	OFS-216-4	10 / 10	-
Off-site Soil Area 216	ZINC	55.6	J	305	J	mg/kg	OFS-216-7	10 / 10	-
Off-site Soil Area 217	ALUMINUM	7650	J	14000	J	mg/kg	OFS-217-4	10 / 10	-
Off-site Soil Area 217	ANTIMONY	0.53	J	1.3	J	mg/kg	OFS-217-1	2 / 10	0.94 - 1.5
Off-site Soil Area 217	ARSENIC	13.5	J	22.8	J	mg/kg	OFS-217-1	10 / 10	-
Off-site Soil Area 217	BARIUM	118	J	225	J	mg/kg	OFS-217-4	10 / 10	-
Off-site Soil Area 217	BERYLLIUM	0.41	J	0.75		mg/kg	OFS-217-4	7 / 10	0.48 - 0.51
Off-site Soil Area 217	CADMIUM	0.69		1.4		mg/kg	OFS-217-2	9 / 10	0.24 - 0.24
Off-site Soil Area 217	CALCIUM	4360	J	11400	J	mg/kg	OFS-217-2	10 / 10	-
Off-site Soil Area 217	CHROMIUM	10	J	20.9	J	mg/kg	OFS-217-6	10 / 10	-
Off-site Soil Area 217	COBALT	6.2		12.1		mg/kg	OFS-217-6	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 217	COPPER	29.3	J	187	J	mg/kg	OFS-217-1	10 / 10	-
Off-site Soil Area 217	IRON	12700		24600		mg/kg	OFS-217-6	10 / 10	-
Off-site Soil Area 217	LEAD	12.7	J	35.3	J	mg/kg	OFS-217-1	10 / 10	-
Off-site Soil Area 217	MAGNESIUM	3880		6770		mg/kg	OFS-217-7	10 / 10	-
Off-site Soil Area 217	MANGANESE	421		887		mg/kg	OFS-217-6	10 / 10	-
Off-site Soil Area 217	MERCURY	0.056	J	0.056	J	mg/kg	OFS-217-9	1 / 10	0.025 - 0.061
Off-site Soil Area 217	NICKEL	9.8		16.7		mg/kg	OFS-217-6	10 / 10	-
Off-site Soil Area 217	POTASSIUM	1430	J+	3740	J+	mg/kg	OFS-217-7	10 / 10	-
Off-site Soil Area 217	SILVER	0.21	J	0.21	J	mg/kg	OFS-217-5	1 / 10	0.15 - 1.1
Off-site Soil Area 217	SODIUM	36.9	J	162	J	mg/kg	OFS-217-9	10 / 10	-
Off-site Soil Area 217	THALLIUM	0.039	J	0.32	J	mg/kg	OFS-217-9	5 / 10	2.5 - 2.6
Off-site Soil Area 217	VANADIUM	23		49.1		mg/kg	OFS-217-9	10 / 10	-
Off-site Soil Area 217	ZINC	67.8	J	148	J	mg/kg	OFS-217-2	10 / 10	-
Off-site Soil Area 218	ALUMINUM	9340		13000		mg/kg	OFS-218-4	10 / 10	-
Off-site Soil Area 218	ANTIMONY	0.49	J	1.4	J	mg/kg	OFS-218-1	10 / 10	-
Off-site Soil Area 218	ARSENIC	8.8	J	69.6	J	mg/kg	OFS-218-2	10 / 10	-
Off-site Soil Area 218	BARIUM	149		217		mg/kg	OFS-218-5	10 / 10	-
Off-site Soil Area 218	BERYLLIUM	0.43	J	0.64	J	mg/kg	OFS-218-4	5 / 10	0.41 - 0.51
Off-site Soil Area 218	CADMIUM	0.61		1.6		mg/kg	OFS-218-8	9 / 10	0.47 - 0.47
Off-site Soil Area 218	CALCIUM	4910		12800		mg/kg	OFS-218-1	10 / 10	-
Off-site Soil Area 218	CHROMIUM	10.5		17.2		mg/kg	OFS-218-2	10 / 10	-
Off-site Soil Area 218	COBALT	7.7		10.2		mg/kg	OFS-218-2	10 / 10	-
Off-site Soil Area 218	COPPER	23.5		133	J	mg/kg	OFS-218-9	10 / 10	-
Off-site Soil Area 218	IRON	15700		20800		mg/kg	OFS-218-2	10 / 10	-
Off-site Soil Area 218	LEAD	6.9		202		mg/kg	OFS-218-8	10 / 10	-
Off-site Soil Area 218	MAGNESIUM	4800		7790		mg/kg	OFS-218-1	10 / 10	-
Off-site Soil Area 218	MANGANESE	492		709		mg/kg	OFS-218-2	10 / 10	-
Off-site Soil Area 218	MERCURY	0.018	J	0.32		mg/kg	OFS-218-2	10 / 10	-
Off-site Soil Area 218	NICKEL	10.9		17.5		mg/kg	OFS-218-2	10 / 10	-
Off-site Soil Area 218	POTASSIUM	1020	J+	3810	J+	mg/kg	OFS-218-7	10 / 10	-
Off-site Soil Area 218	SELENIUM	0.71	J	0.71	J	mg/kg	OFS-218-9	1 / 10	3.5 - 4.1
Off-site Soil Area 218	SODIUM	33.4	J	1170		mg/kg	OFS-218-1	10 / 10	-
Off-site Soil Area 218	THALLIUM	0.063	J	0.25	J	mg/kg	OFS-218-9	5 / 10	2.5 - 2.9
Off-site Soil Area 218	VANADIUM	30.5		38.7		mg/kg	OFS-218-2	10 / 10	-
Off-site Soil Area 218	ZINC	40.9		239		mg/kg	OFS-218-2	10 / 10	-
Off-site Soil Area 219	ALUMINUM	7960		12500		mg/kg	OFS-219-7	10 / 10	-
Off-site Soil Area 219	ANTIMONY	0.57	J	1.3	J	mg/kg	OFS-219-5	10 / 10	-
Off-site Soil Area 219	ARSENIC	6.7	J	26.5	J	mg/kg	OFS-219-9	10 / 10	-
Off-site Soil Area 219	BARIUM	104		228		mg/kg	OFS-219-7	10 / 10	-
Off-site Soil Area 219	BERYLLIUM	0.44	J	0.58	J	mg/kg	OFS-219-5	6 / 10	0.34 - 0.52
Off-site Soil Area 219	CADMIUM	0.76		1.1		mg/kg	OFS-219-1	8 / 10	0.34 - 0.54

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 219	CALCIUM	4660		8170		mg/kg	OFS-219-9	10 / 10	-
Off-site Soil Area 219	CHROMIUM	9.5		14.3		mg/kg	OFS-219-9	10 / 10	-
Off-site Soil Area 219	COBALT	7.5		10.9		mg/kg	OFS-219-8	10 / 10	-
Off-site Soil Area 219	COPPER	16.6		60.1	J	mg/kg	OFS-219-9	10 / 10	-
Off-site Soil Area 219	IRON	14500		21800		mg/kg	OFS-219-9	10 / 10	-
Off-site Soil Area 219	LEAD	7.3		28.5		mg/kg	OFS-219-1	10 / 10	-
Off-site Soil Area 219	MAGNESIUM	4070		6540		mg/kg	OFS-219-8	10 / 10	-
Off-site Soil Area 219	MANGANESE	449		675		mg/kg	OFS-219-7	10 / 10	-
Off-site Soil Area 219	MERCURY	0.016	J	0.099	J	mg/kg	OFS-219-6	10 / 10	-
Off-site Soil Area 219	NICKEL	8.7		14.1		mg/kg	OFS-219-9	10 / 10	-
Off-site Soil Area 219	POTASSIUM	841	J+	3650	J+	mg/kg	OFS-219-6	10 / 10	-
Off-site Soil Area 219	SELENIUM	0.42	J	0.42	J	mg/kg	OFS-219-9	1 / 10	3.5 - 3.8
Off-site Soil Area 219	SODIUM	35.6	J	70.9	J	mg/kg	OFS-219-9	10 / 10	-
Off-site Soil Area 219	THALLIUM	0.041	J	0.45	J	mg/kg	OFS-219-9	8 / 10	2.5 - 2.6
Off-site Soil Area 219	VANADIUM	27.2		39.7		mg/kg	OFS-219-9	10 / 10	-
Off-site Soil Area 219	ZINC	36.4		173		mg/kg	OFS-219-1	10 / 10	-
Off-site Soil Area 220	ALUMINUM	9500		45600		mg/kg	OFS-200-1	12 / 12	-
Off-site Soil Area 220	ANTIMONY	0.29	J	0.62	J	mg/kg	OFS-200-1	7 / 12	6 - 6.4
Off-site Soil Area 220	ARSENIC	2.6	J	37		mg/kg	OFS-220-3	12 / 12	-
Off-site Soil Area 220	BARIUM	22.8		184		mg/kg	OFS-220-6	12 / 12	-
Off-site Soil Area 220	BERYLLIUM	0.1	J	0.57		mg/kg	OFS-220-6	8 / 12	0.35 - 0.5
Off-site Soil Area 220	CADMIUM	0.52		0.63		mg/kg	OFS-220-7	3 / 12	0.27 - 0.53
Off-site Soil Area 220	CALCIUM	3920		12800		mg/kg	OFS-220-3	12 / 12	-
Off-site Soil Area 220	CHROMIUM	10		58.9		mg/kg	OFS-200-1	12 / 12	-
Off-site Soil Area 220	COBALT	7.7		35.8		mg/kg	OFS-200-1	12 / 12	-
Off-site Soil Area 220	COPPER	30.9		84		mg/kg	OFS-200-1	12 / 12	-
Off-site Soil Area 220	IRON	15700		66700		mg/kg	OFS-200-1	12 / 12	-
Off-site Soil Area 220	LEAD	2.3		48		mg/kg	OFS-220-7	12 / 12	-
Off-site Soil Area 220	MAGNESIUM	4500		37300		mg/kg	OFS-200-1	12 / 12	-
Off-site Soil Area 220	MANGANESE	482		939		mg/kg	OFS-200-1	12 / 12	-
Off-site Soil Area 220	MERCURY	0.025	J	0.13		mg/kg	OFS-220-7	11 / 12	0.11 - 0.11
Off-site Soil Area 220	NICKEL	10.6		56.4		mg/kg	OFS-200-1	12 / 12	-
Off-site Soil Area 220	POTASSIUM	9.6	J+	3800	J+	mg/kg	OFS-220-1	12 / 12	-
Off-site Soil Area 220	SELENIUM	0.49	J	2.2	J-	mg/kg	OFS-200-1	7 / 12	0.38 - 3.8
Off-site Soil Area 220	SILVER	0.089	J	0.29	J	mg/kg	OFS-220-7	9 / 12	0.19 - 0.27
Off-site Soil Area 220	SODIUM	23	J	107	J	mg/kg	OFS-220-1	11 / 12	33.8 - 33.8
Off-site Soil Area 220	THALLIUM	0.34	J	1.4	J	mg/kg	OFS-200-1	2 / 12	2.5 - 2.7
Off-site Soil Area 220	VANADIUM	25.8		193		mg/kg	OFS-200-1	12 / 12	-
Off-site Soil Area 220	ZINC	63.8		190		mg/kg	OFS-220-7	12 / 12	-
Off-site Soil Area 221	ALUMINUM	13900		28100		mg/kg	OFS-221-6	10 / 10	-
Off-site Soil Area 221	ANTIMONY	1.2	J	3	J	mg/kg	OFS-221-3	9 / 10	2.5 - 2.5

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 221	ARSENIC	22.6		150		mg/kg	OFS-221-4	10 / 10	-
Off-site Soil Area 221	BARIUM	251		2860		mg/kg	OFS-221-6	10 / 10	-
Off-site Soil Area 221	BERYLLIUM	0.66		1.8		mg/kg	OFS-221-6	10 / 10	-
Off-site Soil Area 221	CADMIUM	1.2		9.5		mg/kg	OFS-221-3	10 / 10	-
Off-site Soil Area 221	CALCIUM	4730		14600		mg/kg	OFS-221-6	10 / 10	-
Off-site Soil Area 221	CHROMIUM	32.2		59.4		mg/kg	OFS-221-3	10 / 10	-
Off-site Soil Area 221	COBALT	15		31.9		mg/kg	OFS-221-6	10 / 10	-
Off-site Soil Area 221	COPPER	77.2		1590		mg/kg	OFS-221-3	10 / 10	-
Off-site Soil Area 221	CYANIDE	0.16	J	0.23	J	mg/kg	OFS-221-9	4 / 10	2.5 - 2.5
Off-site Soil Area 221	IRON	20100		32700		mg/kg	OFS-221-6	10 / 10	-
Off-site Soil Area 221	LEAD	21.9		307		mg/kg	OFS-221-3	10 / 10	-
Off-site Soil Area 221	MAGNESIUM	5410		25000		mg/kg	OFS-221-4	10 / 10	-
Off-site Soil Area 221	MANGANESE	641		3040		mg/kg	OFS-221-6	10 / 10	-
Off-site Soil Area 221	MERCURY	0.13		0.64		mg/kg	OFS-221-3	8 / 10	0.074 - 0.081
Off-site Soil Area 221	NICKEL	40.3		141		mg/kg	OFS-221-4	10 / 10	-
Off-site Soil Area 221	POTASSIUM	1670	J+	4100	J+	mg/kg	OFS-221-9	10 / 10	-
Off-site Soil Area 221	SELENIUM	0.16	J	2	J	mg/kg	OFS-221-3	7 / 10	3.7 - 4.1
Off-site Soil Area 221	SILVER	1.1		3.2		mg/kg	OFS-221-3	4 / 10	0.31 - 1.2
Off-site Soil Area 221	SODIUM	52.1	J	2120		mg/kg	OFS-221-4	9 / 10	91.6 - 91.6
Off-site Soil Area 221	THALLIUM	0.1	J	0.1	J	mg/kg	OFS-221-6	1 / 10	2.5 - 3
Off-site Soil Area 221	VANADIUM	42.3		89.2		mg/kg	OFS-221-6	10 / 10	-
Off-site Soil Area 221	ZINC	53		816		mg/kg	OFS-221-3	10 / 10	-
Off-site Soil Area 222	ALUMINUM	12700		16800		mg/kg	OFS-222-8	10 / 10	-
Off-site Soil Area 222	ANTIMONY	0.45	J	0.92	J	mg/kg	OFS-222-3	5 / 10	6 - 6.4
Off-site Soil Area 222	ARSENIC	18.3		175		mg/kg	OFS-222-2	10 / 10	-
Off-site Soil Area 222	BARIUM	147		236		mg/kg	OFS-222-1	10 / 10	-
Off-site Soil Area 222	BERYLLIUM	0.44	J	0.61		mg/kg	OFS-222-8	10 / 10	-
Off-site Soil Area 222	CADMIUM	0.94	J	4	J	mg/kg	OFS-222-2	8 / 10	0.27 - 0.32
Off-site Soil Area 222	CALCIUM	4640		18200		mg/kg	OFS-222-5	10 / 10	-
Off-site Soil Area 222	CHROMIUM	14.9		21.4		mg/kg	OFS-222-1	10 / 10	-
Off-site Soil Area 222	COBALT	9.5		13.4		mg/kg	OFS-222-2	10 / 10	-
Off-site Soil Area 222	COPPER	48.9		825		mg/kg	OFS-222-2	10 / 10	-
Off-site Soil Area 222	CYANIDE	0.27	J	0.78	J	mg/kg	OFS-222-3	10 / 10	-
Off-site Soil Area 222	IRON	18600		28600		mg/kg	OFS-222-2	10 / 10	-
Off-site Soil Area 222	LEAD	35.7		9150		mg/kg	OFS-222-2	10 / 10	-
Off-site Soil Area 222	MAGNESIUM	4800		6490		mg/kg	OFS-222-8	10 / 10	-
Off-site Soil Area 222	MANGANESE	458		634		mg/kg	OFS-222-5	10 / 10	-
Off-site Soil Area 222	MERCURY	0.062	J+	2.2	J+	mg/kg	OFS-222-2	10 / 10	-
Off-site Soil Area 222	NICKEL	14.8		19.1		mg/kg	OFS-222-1	10 / 10	-
Off-site Soil Area 222	POTASSIUM	1410		3430		mg/kg	OFS-222-5	10 / 10	-
Off-site Soil Area 222	SELENIUM	0.59	J	4.1		mg/kg	OFS-222-2	2 / 10	3.5 - 3.7

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 222	SILVER	0.48	J	6.2		mg/kg	OFS-222-2	5 / 10	1 - 1.1
Off-site Soil Area 222	SODIUM	58.6	J	165	J	mg/kg	OFS-222-2	10 / 10	-
Off-site Soil Area 222	VANADIUM	32.3		39.7		mg/kg	OFS-222-1	10 / 10	-
Off-site Soil Area 222	ZINC	89.6		1020		mg/kg	OFS-222-2	10 / 10	-
Off-site Soil Area 223	ALUMINUM	5700		11200		mg/kg	OFS-223-2	10 / 10	-
Off-site Soil Area 223	ANTIMONY	0.47	J	2.4	J	mg/kg	OFS-223-9	10 / 10	-
Off-site Soil Area 223	ARSENIC	28.2		579		mg/kg	OFS-223-2	10 / 10	-
Off-site Soil Area 223	BARIUM	78.9		144		mg/kg	OFS-223-9	10 / 10	-
Off-site Soil Area 223	BERYLLIUM	0.31	J	0.31	J	mg/kg	OFS-223-9	1 / 10	0.22 - 0.43
Off-site Soil Area 223	CADMIUM	0.85		4.5		mg/kg	OFS-223-5	10 / 10	-
Off-site Soil Area 223	CALCIUM	5830		19500		mg/kg	OFS-223-7	10 / 10	-
Off-site Soil Area 223	CHROMIUM	7.1		13		mg/kg	OFS-223-3	10 / 10	-
Off-site Soil Area 223	COBALT	6.1		10.6		mg/kg	OFS-223-6	9 / 10	5.7 - 5.7
Off-site Soil Area 223	COPPER	39.1		92.5		mg/kg	OFS-223-2	10 / 10	-
Off-site Soil Area 223	IRON	11700		31600		mg/kg	OFS-223-2	10 / 10	-
Off-site Soil Area 223	LEAD	63.2		456		mg/kg	OFS-223-2	10 / 10	-
Off-site Soil Area 223	MAGNESIUM	4050		6230		mg/kg	OFS-223-5	10 / 10	-
Off-site Soil Area 223	MANGANESE	298		790		mg/kg	OFS-223-9	10 / 10	-
Off-site Soil Area 223	MERCURY	0.15		2		mg/kg	OFS-223-2	10 / 10	-
Off-site Soil Area 223	NICKEL	8		16.6		mg/kg	OFS-223-5	10 / 10	-
Off-site Soil Area 223	POTASSIUM	2040	J+	10400	J+	mg/kg	OFS-223-8	10 / 10	-
Off-site Soil Area 223	SELENIUM	0.5	J	3.7	J	mg/kg	OFS-223-2	9 / 10	4 - 4
Off-site Soil Area 223	SILVER	0.37	J	2.4		mg/kg	OFS-223-2	10 / 10	-
Off-site Soil Area 223	SODIUM	47.7	J	2460		mg/kg	OFS-223-8	10 / 10	-
Off-site Soil Area 223	THALLIUM	0.26	J	0.26	J	mg/kg	OFS-223-9	1 / 10	2.5 - 3.1
Off-site Soil Area 223	VANADIUM	21.1		43.9		mg/kg	OFS-223-2	10 / 10	-
Off-site Soil Area 223	ZINC	210		1310		mg/kg	OFS-223-2	10 / 10	-
Off-site Soil Area 224	ALUMINUM	5630		15500		mg/kg	OFS-224-9	10 / 10	-
Off-site Soil Area 224	ANTIMONY	0.41	J	0.41	J	mg/kg	OFS-224-9	1 / 10	0.85 - 1.4
Off-site Soil Area 224	ARSENIC	12.9		78.7		mg/kg	OFS-224-3	10 / 10	-
Off-site Soil Area 224	BARIUM	80.3		245		mg/kg	OFS-224-9	10 / 10	-
Off-site Soil Area 224	BERYLLIUM	0.62		0.62		mg/kg	OFS-224-9	1 / 10	0.27 - 0.49
Off-site Soil Area 224	CADMIUM	0.89		2.5		mg/kg	OFS-224-5	9 / 10	0.28 - 0.28
Off-site Soil Area 224	CALCIUM	3040		32400		mg/kg	OFS-224-9	10 / 10	-
Off-site Soil Area 224	CHROMIUM	8.6		21.3		mg/kg	OFS-224-9	10 / 10	-
Off-site Soil Area 224	COBALT	6.4		12.4		mg/kg	OFS-224-9	10 / 10	-
Off-site Soil Area 224	COPPER	21.2		58.9		mg/kg	OFS-224-6	10 / 10	-
Off-site Soil Area 224	IRON	13200		23500		mg/kg	OFS-224-6	10 / 10	-
Off-site Soil Area 224	LEAD	21.3	J	185		mg/kg	OFS-224-5	10 / 10	-
Off-site Soil Area 224	MAGNESIUM	2990		7950		mg/kg	OFS-224-9	10 / 10	-
Off-site Soil Area 224	MANGANESE	423		769		mg/kg	OFS-224-3	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 224	MERCURY	0.055	J	0.85		mg/kg	OFS-224-5	10 / 10	-
Off-site Soil Area 224	NICKEL	7.8		23.2		mg/kg	OFS-224-9	10 / 10	-
Off-site Soil Area 224	POTASSIUM	2060	J+	4020	J+	mg/kg	OFS-224-6	10 / 10	-
Off-site Soil Area 224	SELENIUM	0.18	J	0.79	J	mg/kg	OFS-224-9	3 / 10	3.5 - 3.8
Off-site Soil Area 224	SILVER	0.072	J	0.95	J	mg/kg	OFS-224-5	9 / 10	0.098 - 0.098
Off-site Soil Area 224	SODIUM	71.9	J	71.9	J	mg/kg	OFS-224-9	1 / 10	22.6 - 56.5
Off-site Soil Area 224	THALLIUM	0.049	J	0.33	J	mg/kg	OFS-224-9	4 / 10	2.5 - 2.5
Off-site Soil Area 224	VANADIUM	23.1		45.6		mg/kg	OFS-224-9	10 / 10	-
Off-site Soil Area 224	ZINC	98.7		542		mg/kg	OFS-224-5	10 / 10	-
Off-site Soil Area 225	ALUMINUM	6590		11100		mg/kg	OFS-225-9	10 / 10	-
Off-site Soil Area 225	ANTIMONY	1.4	J	1.4	J	mg/kg	OFS-225-9	1 / 10	1.4 - 2.3
Off-site Soil Area 225	ARSENIC	29.7		157		mg/kg	OFS-225-8	10 / 10	-
Off-site Soil Area 225	BARIUM	85.5		130		mg/kg	OFS-225-3	10 / 10	-
Off-site Soil Area 225	BERYLLIUM	0.36	J	0.36	J	mg/kg	OFS-225-9	1 / 10	0.23 - 0.42
Off-site Soil Area 225	CADMIUM	1.2		4.6		mg/kg	OFS-225-1	9 / 10	0.57 - 0.57
Off-site Soil Area 225	CALCIUM	4100		13100		mg/kg	OFS-225-7	10 / 10	-
Off-site Soil Area 225	CHROMIUM	9.3		16.4		mg/kg	OFS-225-9	10 / 10	-
Off-site Soil Area 225	COBALT	6.1		11.7		mg/kg	OFS-225-8	9 / 10	5.5 - 5.5
Off-site Soil Area 225	COPPER	38.6		66.1		mg/kg	OFS-225-1	10 / 10	-
Off-site Soil Area 225	CYANIDE	0.17	J	0.26	J	mg/kg	OFS-225-4	2 / 10	0.15 - 3.5
Off-site Soil Area 225	IRON	17000		27000		mg/kg	OFS-225-9	10 / 10	-
Off-site Soil Area 225	LEAD	41.7		351		mg/kg	OFS-225-1	10 / 10	-
Off-site Soil Area 225	MAGNESIUM	4020		6110		mg/kg	OFS-225-9	10 / 10	-
Off-site Soil Area 225	MANGANESE	333		683		mg/kg	OFS-225-1	10 / 10	-
Off-site Soil Area 225	MERCURY	0.087	J	1.7		mg/kg	OFS-225-8	10 / 10	-
Off-site Soil Area 225	NICKEL	7.8		15		mg/kg	OFS-225-9	10 / 10	-
Off-site Soil Area 225	POTASSIUM	2830	J+	5090	J+	mg/kg	OFS-225-4	10 / 10	-
Off-site Soil Area 225	SELENIUM	0.22	J	2.5	J	mg/kg	OFS-225-1	9 / 10	3.7 - 3.7
Off-site Soil Area 225	SILVER	0.1	J	1.3		mg/kg	OFS-225-8	9 / 10	0.35 - 0.35
Off-site Soil Area 225	SODIUM	409	J	1230		mg/kg	OFS-225-1	2 / 10	55.2 - 494
Off-site Soil Area 225	THALLIUM	0.04	J	0.3	J	mg/kg	OFS-225-9	5 / 10	2.7 - 3.5
Off-site Soil Area 225	VANADIUM	24.7		43.9		mg/kg	OFS-225-9	10 / 10	-
Off-site Soil Area 225	ZINC	160		917		mg/kg	OFS-225-1	10 / 10	-
Off-site Soil Area 226	ALUMINUM	8420		12200		mg/kg	OFS-226-7	10 / 10	-
Off-site Soil Area 226	ANTIMONY	0.59	J	4.8	J	mg/kg	OFS-226-3	10 / 10	-
Off-site Soil Area 226	ARSENIC	59.8		618		mg/kg	OFS-226-3	10 / 10	-
Off-site Soil Area 226	BARIUM	57.2		160		mg/kg	OFS-226-9	10 / 10	-
Off-site Soil Area 226	BERYLLIUM	0.28	J	0.49	J	mg/kg	OFS-226-2	10 / 10	-
Off-site Soil Area 226	CADMIUM	1.1		4.8		mg/kg	OFS-226-9	10 / 10	-
Off-site Soil Area 226	CALCIUM	2640		11300		mg/kg	OFS-226-4	10 / 10	-
Off-site Soil Area 226	CHROMIUM	10.3		19.6		mg/kg	OFS-226-9	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 226	COBALT	7.4		12.3		mg/kg	OFS-226-7	10 / 10	-
Off-site Soil Area 226	COPPER	28.5		496		mg/kg	OFS-226-7	10 / 10	-
Off-site Soil Area 226	CYANIDE	0.26	J	0.49	J	mg/kg	OFS-226-9	3 / 10	2.5 - 2.7
Off-site Soil Area 226	IRON	19800		39300		mg/kg	OFS-226-3	10 / 10	-
Off-site Soil Area 226	LEAD	61.3		904		mg/kg	OFS-226-3	10 / 10	-
Off-site Soil Area 226	MAGNESIUM	4260		6180		mg/kg	OFS-226-9	10 / 10	-
Off-site Soil Area 226	MANGANESE	336		631		mg/kg	OFS-226-2	10 / 10	-
Off-site Soil Area 226	MERCURY	0.2		3.9		mg/kg	OFS-226-3	10 / 10	-
Off-site Soil Area 226	NICKEL	9.1		16.8		mg/kg	OFS-226-9	10 / 10	-
Off-site Soil Area 226	POTASSIUM	1540	J+	4090	J+	mg/kg	OFS-226-9	10 / 10	-
Off-site Soil Area 226	SELENIUM	0.56	J	7.3	J	mg/kg	OFS-226-3	9 / 10	3.5 - 3.5
Off-site Soil Area 226	SILVER	0.35	J	5.2		mg/kg	OFS-226-3	10 / 10	-
Off-site Soil Area 226	SODIUM	56.8	J	580		mg/kg	OFS-226-9	6 / 10	48.3 - 346
Off-site Soil Area 226	THALLIUM	0.47	J	0.47	J	mg/kg	OFS-226-9	1 / 10	2.5 - 3.3
Off-site Soil Area 226	VANADIUM	32.4		46.7		mg/kg	OFS-226-3	10 / 10	-
Off-site Soil Area 226	ZINC	304		1250		mg/kg	OFS-226-9	10 / 10	-
Off-site Soil Area 227	ALUMINUM	10100		16900		mg/kg	OFS-227-7	10 / 10	-
Off-site Soil Area 227	ANTIMONY	0.25	J	4	J	mg/kg	OFS-227-9	10 / 10	-
Off-site Soil Area 227	ARSENIC	29.7		667	J	mg/kg	OFS-227-9	10 / 10	-
Off-site Soil Area 227	BARIUM	129		477		mg/kg	OFS-227-9	10 / 10	-
Off-site Soil Area 227	BERYLLIUM	0.42	J	0.8		mg/kg	OFS-227-7	10 / 10	-
Off-site Soil Area 227	CADMIUM	0.6		4.5		mg/kg	OFS-227-9	10 / 10	-
Off-site Soil Area 227	CALCIUM	5190		17600		mg/kg	OFS-227-6	10 / 10	-
Off-site Soil Area 227	CHROMIUM	16.4		31.5		mg/kg	OFS-227-9	10 / 10	-
Off-site Soil Area 227	COBALT	9.9		15.3		mg/kg	OFS-227-2	10 / 10	-
Off-site Soil Area 227	COPPER	76.4		242		mg/kg	OFS-227-1	10 / 10	-
Off-site Soil Area 227	CYANIDE	0.18	J	0.85	J	mg/kg	OFS-227-9	7 / 10	2.5 - 2.6
Off-site Soil Area 227	IRON	18600		41500		mg/kg	OFS-227-9	10 / 10	-
Off-site Soil Area 227	LEAD	38.6		1270	J	mg/kg	OFS-227-9	10 / 10	-
Off-site Soil Area 227	MAGNESIUM	5560		8390		mg/kg	OFS-227-1	10 / 10	-
Off-site Soil Area 227	MANGANESE	721		1610		mg/kg	OFS-227-6	10 / 10	-
Off-site Soil Area 227	MERCURY	0.16		2		mg/kg	OFS-227-9	7 / 10	0.067 - 0.1
Off-site Soil Area 227	NICKEL	17.8		31		mg/kg	OFS-227-1	10 / 10	-
Off-site Soil Area 227	POTASSIUM	2830	J+	4890	J+	mg/kg	OFS-227-1	10 / 10	-
Off-site Soil Area 227	SELENIUM	0.57	J	4.4		mg/kg	OFS-227-9	6 / 10	3.5 - 3.8
Off-site Soil Area 227	SILVER	0.3	J	2.3		mg/kg	OFS-227-9	10 / 10	-
Off-site Soil Area 227	SODIUM	43.1	J	165	J	mg/kg	OFS-227-9	10 / 10	-
Off-site Soil Area 227	THALLIUM	0.44	J	0.44	J	mg/kg	OFS-227-9	1 / 10	2.5 - 2.7
Off-site Soil Area 227	VANADIUM	38.8		56.2		mg/kg	OFS-227-9	10 / 10	-
Off-site Soil Area 227	ZINC	126		1490		mg/kg	OFS-227-9	10 / 10	-
Off-site Soil Area 228	ALUMINUM	7490		13900		mg/kg	OFS-228-1	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 228	ANTIMONY	0.34	J	0.6	J	mg/kg	OFS-228-2	4 / 10	1.6 - 6.3
Off-site Soil Area 228	ARSENIC	5.6		36.6		mg/kg	OFS-228-4	10 / 10	-
Off-site Soil Area 228	BARIUM	134		280		mg/kg	OFS-228-1	10 / 10	-
Off-site Soil Area 228	BERYLLIUM	0.43	J	0.81		mg/kg	OFS-228-1	8 / 10	0.45 - 0.45
Off-site Soil Area 228	CADMIUM	0.56		2.3		mg/kg	OFS-228-2	8 / 10	0.28 - 0.36
Off-site Soil Area 228	CALCIUM	5290		77000		mg/kg	OFS-228-1	10 / 10	-
Off-site Soil Area 228	CHROMIUM	11.9		19.1		mg/kg	OFS-228-1	10 / 10	-
Off-site Soil Area 228	COBALT	7.8		10.1		mg/kg	OFS-228-2	10 / 10	-
Off-site Soil Area 228	COPPER	35.2		275		mg/kg	OFS-228-8	10 / 10	-
Off-site Soil Area 228	CYANIDE	0.18	J	2.5		mg/kg	OFS-228-6	6 / 10	2.5 - 2.6
Off-site Soil Area 228	IRON	13700		18000		mg/kg	OFS-228-4	10 / 10	-
Off-site Soil Area 228	LEAD	14.8	J	107	J	mg/kg	OFS-228-2	10 / 10	-
Off-site Soil Area 228	MAGNESIUM	3910		6720		mg/kg	OFS-228-1	10 / 10	-
Off-site Soil Area 228	MANGANESE	418		798		mg/kg	OFS-228-9	10 / 10	-
Off-site Soil Area 228	MERCURY	0.027	J	0.22		mg/kg	OFS-228-8	7 / 10	0.016 - 0.092
Off-site Soil Area 228	NICKEL	12.2		24.9		mg/kg	OFS-228-1	10 / 10	-
Off-site Soil Area 228	POTASSIUM	2090	J+	4430	J+	mg/kg	OFS-228-9	10 / 10	-
Off-site Soil Area 228	SELENIUM	0.44	J	1.1	J	mg/kg	OFS-228-8	10 / 10	-
Off-site Soil Area 228	SILVER	0.22	J	0.22	J	mg/kg	OFS-228-9	1 / 10	0.063 - 0.79
Off-site Soil Area 228	SODIUM	52.8	J	314	J	mg/kg	OFS-228-4	9 / 10	104 - 104
Off-site Soil Area 228	VANADIUM	24.8		35.4		mg/kg	OFS-228-1	10 / 10	-
Off-site Soil Area 228	ZINC	44.1		363		mg/kg	OFS-228-4	10 / 10	-
Off-site Soil Area 229	ALUMINUM	7660		11900		mg/kg	OFS-229-1	10 / 10	-
Off-site Soil Area 229	ANTIMONY	0.94	J	23.1	J	mg/kg	OFS-229-9	3 / 10	0.51 - 1.7
Off-site Soil Area 229	ARSENIC	13.8		652		mg/kg	OFS-229-9	10 / 10	-
Off-site Soil Area 229	BARIUM	112		292		mg/kg	OFS-229-1	10 / 10	-
Off-site Soil Area 229	BERYLLIUM	0.53		0.67		mg/kg	OFS-229-1	6 / 10	0.31 - 0.5
Off-site Soil Area 229	CADMIUM	0.79		10.9		mg/kg	OFS-229-8	10 / 10	-
Off-site Soil Area 229	CALCIUM	4880		19200		mg/kg	OFS-229-8	10 / 10	-
Off-site Soil Area 229	CHROMIUM	10		21.1		mg/kg	OFS-229-1	10 / 10	-
Off-site Soil Area 229	COBALT	5.7		15.8		mg/kg	OFS-229-4	10 / 10	-
Off-site Soil Area 229	COPPER	91.1		297		mg/kg	OFS-229-1	10 / 10	-
Off-site Soil Area 229	CYANIDE	0.17	J	1	J	mg/kg	OFS-229-1	8 / 10	0.14 - 3
Off-site Soil Area 229	IRON	14000		35000		mg/kg	OFS-229-9	10 / 10	-
Off-site Soil Area 229	LEAD	25.4	J	2360		mg/kg	OFS-229-9	10 / 10	-
Off-site Soil Area 229	MAGNESIUM	3310		5890		mg/kg	OFS-229-1	10 / 10	-
Off-site Soil Area 229	MANGANESE	306		1660		mg/kg	OFS-229-1	10 / 10	-
Off-site Soil Area 229	MERCURY	0.072	J	8		mg/kg	OFS-229-9	10 / 10	-
Off-site Soil Area 229	NICKEL	9.6		19.2		mg/kg	OFS-229-1	10 / 10	-
Off-site Soil Area 229	POTASSIUM	2890	J+	5500	J+	mg/kg	OFS-229-1	10 / 10	-
Off-site Soil Area 229	SELENIUM	0.45	J	6.8		mg/kg	OFS-229-9	9 / 10	3.5 - 3.5

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 229	SILVER	0.4	J	17.7		mg/kg	OFS-229-9	10 / 10	-
Off-site Soil Area 229	SODIUM	85.7	J	553		mg/kg	OFS-229-8	2 / 10	74.9 - 423
Off-site Soil Area 229	VANADIUM	25.5		35.1		mg/kg	OFS-229-5	10 / 10	-
Off-site Soil Area 229	ZINC	86.3		3060		mg/kg	OFS-229-8	10 / 10	-
Off-site Soil Area 230	ALUMINUM	6480		13200		mg/kg	OFS-230-9	10 / 10	-
Off-site Soil Area 230	ANTIMONY	3	J	3	J	mg/kg	OFS-230-1	1 / 10	6 - 6.1
Off-site Soil Area 230	ARSENIC	9.7		135		mg/kg	OFS-230-1	10 / 10	-
Off-site Soil Area 230	BARIUM	80		175		mg/kg	OFS-230-9	10 / 10	-
Off-site Soil Area 230	BERYLLIUM	0.16	J	0.39	J	mg/kg	OFS-230-5	10 / 10	-
Off-site Soil Area 230	CADMIUM	0.51	J	3.9	J	mg/kg	OFS-230-1	7 / 10	0.06 - 0.5
Off-site Soil Area 230	CALCIUM	4550		16500		mg/kg	OFS-230-7	10 / 10	-
Off-site Soil Area 230	CHROMIUM	9		20.2		mg/kg	OFS-230-4	10 / 10	-
Off-site Soil Area 230	COBALT	6.5		12.4		mg/kg	OFS-230-4	10 / 10	-
Off-site Soil Area 230	COPPER	18.2		90.7		mg/kg	OFS-230-1	10 / 10	-
Off-site Soil Area 230	CYANIDE	0.23	J	0.61	J	mg/kg	OFS-230-5	8 / 10	2.5 - 2.5
Off-site Soil Area 230	IRON	12000		22100		mg/kg	OFS-230-1	10 / 10	-
Off-site Soil Area 230	LEAD	10.4		1060		mg/kg	OFS-230-1	10 / 10	-
Off-site Soil Area 230	MAGNESIUM	3340		5810		mg/kg	OFS-230-5	10 / 10	-
Off-site Soil Area 230	MANGANESE	395		669		mg/kg	OFS-230-4	10 / 10	-
Off-site Soil Area 230	MERCURY	0.061	J+	1	J+	mg/kg	OFS-230-1	5 / 10	0.1 - 0.1
Off-site Soil Area 230	NICKEL	11.1		18.7		mg/kg	OFS-230-4	10 / 10	-
Off-site Soil Area 230	POTASSIUM	878		2920	J+	mg/kg	OFS-230-8	10 / 10	-
Off-site Soil Area 230	SELENIUM	0.66	J	0.66	J	mg/kg	OFS-230-1	1 / 10	1.7 - 3.5
Off-site Soil Area 230	SILVER	0.45	J	0.45	J	mg/kg	OFS-230-9	1 / 10	1 - 1
Off-site Soil Area 230	SODIUM	41.4	J	219	J	mg/kg	OFS-230-5	10 / 10	-
Off-site Soil Area 230	VANADIUM	21.9		34.6		mg/kg	OFS-230-9	10 / 10	-
Off-site Soil Area 230	ZINC	47.6		1050		mg/kg	OFS-230-1	10 / 10	-
Off-site Soil Area 231	ALUMINUM	9310		13100		mg/kg	OFS-231-4	10 / 10	-
Off-site Soil Area 231	ARSENIC	16		30.2	J	mg/kg	OFS-231-7	10 / 10	-
Off-site Soil Area 231	BARIUM	133		248		mg/kg	OFS-231-4	10 / 10	-
Off-site Soil Area 231	BERYLLIUM	0.41	J	0.59		mg/kg	OFS-231-3	9 / 10	0.41 - 0.41
Off-site Soil Area 231	CADMIUM	1.1		2.3		mg/kg	OFS-231-5	10 / 10	-
Off-site Soil Area 231	CALCIUM	4470		9250		mg/kg	OFS-231-4	10 / 10	-
Off-site Soil Area 231	CHROMIUM	13.6		23.2		mg/kg	OFS-231-2	10 / 10	-
Off-site Soil Area 231	COBALT	8.7		12.4		mg/kg	OFS-231-2	10 / 10	-
Off-site Soil Area 231	COPPER	47.6		186		mg/kg	OFS-231-3	10 / 10	-
Off-site Soil Area 231	CYANIDE	0.49	J	0.49	J	mg/kg	OFS-231-8	1 / 10	2.5 - 2.5
Off-site Soil Area 231	IRON	15700		21600		mg/kg	OFS-231-2	10 / 10	-
Off-site Soil Area 231	LEAD	28.6		150		mg/kg	OFS-231-3	10 / 10	-
Off-site Soil Area 231	MAGNESIUM	4600		6000		mg/kg	OFS-231-4	10 / 10	-
Off-site Soil Area 231	MANGANESE	523		680		mg/kg	OFS-231-4	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 231	MERCURY	0.059	J	0.18		mg/kg	OFS-231-1	9 / 10	0.06 - 0.06
Off-site Soil Area 231	NICKEL	13.3		18.5		mg/kg	OFS-231-5	10 / 10	-
Off-site Soil Area 231	POTASSIUM	1490	J+	5250	J+	mg/kg	OFS-231-3	10 / 10	-
Off-site Soil Area 231	SELENIUM	0.18	J	0.37	J	mg/kg	OFS-231-6	6 / 10	3.5 - 3.8
Off-site Soil Area 231	SILVER	0.11	J	0.63	J	mg/kg	OFS-231-3	6 / 10	1 - 1.1
Off-site Soil Area 231	SODIUM	37.7	J	98.7	J	mg/kg	OFS-231-8	10 / 10	-
Off-site Soil Area 231	VANADIUM	31.1		46.5		mg/kg	OFS-231-2	10 / 10	-
Off-site Soil Area 231	ZINC	96.2		322		mg/kg	OFS-231-5	10 / 10	-
Off-site Soil Area 232	ALUMINUM	10200		14000		mg/kg	OFS-232-2	10 / 10	-
Off-site Soil Area 232	ARSENIC	8.8	J	28.1	J	mg/kg	OFS-232-1	10 / 10	-
Off-site Soil Area 232	BARIUM	125		182		mg/kg	OFS-232-2	10 / 10	-
Off-site Soil Area 232	BERYLLIUM	0.067	J	0.23	J	mg/kg	OFS-232-2	9 / 10	0.5 - 0.5
Off-site Soil Area 232	CADMIUM	0.4	J	1.2	J	mg/kg	OFS-232-1	10 / 10	-
Off-site Soil Area 232	CALCIUM	6550		27900		mg/kg	OFS-232-9	10 / 10	-
Off-site Soil Area 232	CHROMIUM	8.4		16.8		mg/kg	OFS-232-1	10 / 10	-
Off-site Soil Area 232	COBALT	8.9		12.2		mg/kg	OFS-232-2	10 / 10	-
Off-site Soil Area 232	COPPER	26.4	J	1640	J	mg/kg	OFS-232-9	10 / 10	-
Off-site Soil Area 232	CYANIDE	0.25	J	0.25	J	mg/kg	OFS-232-7	1 / 10	2.5 - 2.8
Off-site Soil Area 232	IRON	13900		19800		mg/kg	OFS-232-1	10 / 10	-
Off-site Soil Area 232	LEAD	18.1		7310		mg/kg	OFS-232-1	10 / 10	-
Off-site Soil Area 232	MAGNESIUM	4620		6910		mg/kg	OFS-232-2	10 / 10	-
Off-site Soil Area 232	MANGANESE	320		668		mg/kg	OFS-232-2	10 / 10	-
Off-site Soil Area 232	MERCURY	0.06	J-	0.4	J-	mg/kg	OFS-232-1	10 / 10	-
Off-site Soil Area 232	NICKEL	9.7		17.8		mg/kg	OFS-232-2	10 / 10	-
Off-site Soil Area 232	POTASSIUM	1310	J+	2240	J+	mg/kg	OFS-232-7	10 / 10	-
Off-site Soil Area 232	SELENIUM	2	J	2.5	J	mg/kg	OFS-232-2	8 / 10	1.7 - 2.5
Off-site Soil Area 232	SILVER	1.3		1.3		mg/kg	OFS-232-1	1 / 10	1 - 1.1
Off-site Soil Area 232	SODIUM	65.4	J	431	J	mg/kg	OFS-232-9	10 / 10	-
Off-site Soil Area 232	VANADIUM	26.8		35.6		mg/kg	OFS-232-2	10 / 10	-
Off-site Soil Area 232	ZINC	78.2		252		mg/kg	OFS-232-1	10 / 10	-
Off-site Soil Area 233	ALUMINUM	11100	J	21500	J	mg/kg	OFS-233-6	10 / 10	-
Off-site Soil Area 233	ANTIMONY	0.69	J	1.4	J	mg/kg	OFS-233-7	2 / 10	0.43 - 6.1
Off-site Soil Area 233	ARSENIC	25.9	J	64.2	J	mg/kg	OFS-233-1	10 / 10	-
Off-site Soil Area 233	BARIUM	133	J	235		mg/kg	OFS-233-1	10 / 10	-
Off-site Soil Area 233	BERYLLIUM	0.26	J	0.79	J	mg/kg	OFS-233-8	10 / 10	-
Off-site Soil Area 233	CADMIUM	0.76	J	5.1	J	mg/kg	OFS-233-1	10 / 10	-
Off-site Soil Area 233	CALCIUM	5710	J	25400	J	mg/kg	OFS-233-6	10 / 10	-
Off-site Soil Area 233	CHROMIUM	13.8		29.4	J	mg/kg	OFS-233-6	10 / 10	-
Off-site Soil Area 233	COBALT	9.4	J	15.9	J	mg/kg	OFS-233-6	10 / 10	-
Off-site Soil Area 233	COPPER	51.5	J	169	J	mg/kg	OFS-233-1	10 / 10	-
Off-site Soil Area 233	CYANIDE	0.32	J	0.82	J	mg/kg	OFS-233-9	8 / 10	2.5 - 2.5

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 233	IRON	17600		31200	J	mg/kg	OFS-233-6	10 / 10	-
Off-site Soil Area 233	LEAD	87.6		633	J	mg/kg	OFS-233-9	10 / 10	-
Off-site Soil Area 233	MAGNESIUM	4040	J	7980	J	mg/kg	OFS-233-6	10 / 10	-
Off-site Soil Area 233	MANGANESE	375	J	721		mg/kg	OFS-233-1	10 / 10	-
Off-site Soil Area 233	MERCURY	0.13		2.6	J-	mg/kg	OFS-233-1	10 / 10	-
Off-site Soil Area 233	NICKEL	13.2		27.4	J	mg/kg	OFS-233-8	10 / 10	-
Off-site Soil Area 233	POTASSIUM	2020	J+	3630	J+	mg/kg	OFS-233-5	10 / 10	-
Off-site Soil Area 233	SELENIUM	2.6	J	3.5	J	mg/kg	OFS-233-5	6 / 10	3.5 - 3.5
Off-site Soil Area 233	SILVER	0.57	J	2.1		mg/kg	OFS-233-1	6 / 10	1 - 1
Off-site Soil Area 233	SODIUM	55.5	J	522		mg/kg	OFS-233-1	10 / 10	-
Off-site Soil Area 233	VANADIUM	31.8		55	J	mg/kg	OFS-233-6	10 / 10	-
Off-site Soil Area 233	ZINC	358		1470		mg/kg	OFS-233-1	10 / 10	-
Off-site Soil Area 234	ALUMINUM	11100	J	19200	J	mg/kg	OFS-234-1	10 / 10	-
Off-site Soil Area 234	ANTIMONY	0.42	J	0.42	J	mg/kg	OFS-234-7	1 / 10	6 - 6.9
Off-site Soil Area 234	ARSENIC	18.6	J	40.7	J	mg/kg	OFS-234-1	10 / 10	-
Off-site Soil Area 234	BARIUM	124	J	212	J	mg/kg	OFS-234-1	10 / 10	-
Off-site Soil Area 234	BERYLLIUM	0.4	J	0.69	J	mg/kg	OFS-234-1	10 / 10	-
Off-site Soil Area 234	CADMIUM	0.71	J	1.6	J	mg/kg	OFS-234-5	10 / 10	-
Off-site Soil Area 234	CALCIUM	4910	J	12700	J	mg/kg	OFS-234-9	10 / 10	-
Off-site Soil Area 234	CHROMIUM	18.3	J	25.5	J	mg/kg	OFS-234-1	10 / 10	-
Off-site Soil Area 234	COBALT	11.2	J	14.2	J	mg/kg	OFS-234-1	10 / 10	-
Off-site Soil Area 234	COPPER	93.2	J	194	J	mg/kg	OFS-234-1	10 / 10	-
Off-site Soil Area 234	CYANIDE	0.35	J	1	J	mg/kg	OFS-234-3	10 / 10	-
Off-site Soil Area 234	IRON	19600	J	26700	J	mg/kg	OFS-234-1	10 / 10	-
Off-site Soil Area 234	LEAD	39.4	J	184	J	mg/kg	OFS-234-1	10 / 10	-
Off-site Soil Area 234	MAGNESIUM	4740	J	6710	J	mg/kg	OFS-234-1	10 / 10	-
Off-site Soil Area 234	MANGANESE	580	J	1070	J	mg/kg	OFS-234-2	10 / 10	-
Off-site Soil Area 234	MERCURY	0.074	J	0.65		mg/kg	OFS-234-1	10 / 10	-
Off-site Soil Area 234	NICKEL	18.2	J	24.6	J	mg/kg	OFS-234-1	10 / 10	-
Off-site Soil Area 234	POTASSIUM	3010	J	4480	J	mg/kg	OFS-234-5	10 / 10	-
Off-site Soil Area 234	SODIUM	50.5	J	190	J	mg/kg	OFS-234-4	10 / 10	-
Off-site Soil Area 234	VANADIUM	36	J	45.3	J	mg/kg	OFS-234-1	10 / 10	-
Off-site Soil Area 234	ZINC	174	J	495	J	mg/kg	OFS-234-1	10 / 10	-
Off-site Soil Area 235	ALUMINUM	15300	J	23900		mg/kg	OFS-235-8	10 / 10	-
Off-site Soil Area 235	ARSENIC	21.1		37.9		mg/kg	OFS-235-7	10 / 10	-
Off-site Soil Area 235	BARIUM	250	J	792		mg/kg	OFS-235-4	10 / 10	-
Off-site Soil Area 235	BERYLLIUM	0.53		0.9		mg/kg	OFS-235-8	10 / 10	-
Off-site Soil Area 235	CADMIUM	0.51	J	2	J	mg/kg	OFS-235-7	7 / 10	0.3 - 0.4
Off-site Soil Area 235	CALCIUM	4370		32200	J	mg/kg	OFS-235-2	10 / 10	-
Off-site Soil Area 235	CHROMIUM	26.6	J	43.2		mg/kg	OFS-235-8	10 / 10	-
Off-site Soil Area 235	COBALT	14.4	J	24.3		mg/kg	OFS-235-7	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 235	COPPER	88.9		567		mg/kg	OFS-235-7	10 / 10	-
Off-site Soil Area 235	CYANIDE	0.24	J	2.5	J	mg/kg	OFS-235-6	10 / 10	-
Off-site Soil Area 235	IRON	25400		32300	J	mg/kg	OFS-235-2	10 / 10	-
Off-site Soil Area 235	IRON	25400	J	32300	J	mg/kg	OFS-235-2	10 / 10	-
Off-site Soil Area 235	LEAD	21.5	J	69.8	J	mg/kg	OFS-235-1	10 / 10	-
Off-site Soil Area 235	MAGNESIUM	6540	J	10900		mg/kg	OFS-235-5	10 / 10	-
Off-site Soil Area 235	MANGANESE	704	J	4880		mg/kg	OFS-235-4	10 / 10	-
Off-site Soil Area 235	MERCURY	0.1		0.85		mg/kg	OFS-235-8	8 / 10	0.11 - 0.11
Off-site Soil Area 235	NICKEL	32.2	J	57.2	J	mg/kg	OFS-235-2	10 / 10	-
Off-site Soil Area 235	POTASSIUM	2940	J	5350		mg/kg	OFS-235-8	10 / 10	-
Off-site Soil Area 235	SODIUM	55.3	J	325	J	mg/kg	OFS-235-3	10 / 10	-
Off-site Soil Area 235	VANADIUM	44.2	J	60.7		mg/kg	OFS-235-5	10 / 10	-
Off-site Soil Area 235	ZINC	130	J	394		mg/kg	OFS-235-6	10 / 10	-
Off-site Soil Area 236	ALUMINUM	12600		22200		mg/kg	OFS-236-8	10 / 10	-
Off-site Soil Area 236	ARSENIC	16.8		52.3		mg/kg	OFS-236-4	10 / 10	-
Off-site Soil Area 236	BARIUM	87.8		344		mg/kg	OFS-236-3	10 / 10	-
Off-site Soil Area 236	BERYLLIUM	0.26	J	0.77		mg/kg	OFS-236-4	10 / 10	-
Off-site Soil Area 236	CADMIUM	0.34	J	2.2	J	mg/kg	OFS-236-5	10 / 10	-
Off-site Soil Area 236	CALCIUM	5020		10500		mg/kg	OFS-236-3	10 / 10	-
Off-site Soil Area 236	CHROMIUM	22		38.4		mg/kg	OFS-236-4	10 / 10	-
Off-site Soil Area 236	COBALT	12.1		20.2		mg/kg	OFS-236-4	10 / 10	-
Off-site Soil Area 236	COPPER	70.6		318		mg/kg	OFS-236-4	10 / 10	-
Off-site Soil Area 236	CYANIDE	0.22	J	0.57	J	mg/kg	OFS-236-5	9 / 10	2.5 - 2.5
Off-site Soil Area 236	IRON	18900		31600		mg/kg	OFS-236-1	10 / 10	-
Off-site Soil Area 236	LEAD	29.8		150		mg/kg	OFS-236-1	10 / 10	-
Off-site Soil Area 236	MAGNESIUM	5670		9490		mg/kg	OFS-236-8	10 / 10	-
Off-site Soil Area 236	MANGANESE	434		1850		mg/kg	OFS-236-3	10 / 10	-
Off-site Soil Area 236	MERCURY	0.042	J	0.28		mg/kg	OFS-236-1	10 / 10	0.1 - 0.1
Off-site Soil Area 236	NICKEL	21.4		40.3		mg/kg	OFS-236-4	10 / 10	-
Off-site Soil Area 236	POTASSIUM	2170		5300		mg/kg	OFS-236-3	10 / 10	-
Off-site Soil Area 236	SODIUM	65.5	J	116	J	mg/kg	OFS-236-2	10 / 10	-
Off-site Soil Area 236	VANADIUM	38.1		61.1		mg/kg	OFS-236-1	10 / 10	-
Off-site Soil Area 236	ZINC	112		371		mg/kg	OFS-236-1	10 / 10	-
Off-site Soil Area 237	ALUMINUM	10200		27100		mg/kg	OFS-237-7	10 / 10	-
Off-site Soil Area 237	ANTIMONY	0.22	J	0.31	J	mg/kg	OFS-237-2	2 / 10	6.1 - 6.3
Off-site Soil Area 237	ARSENIC	12.4		73.7		mg/kg	OFS-237-5	10 / 10	-
Off-site Soil Area 237	BARIUM	194		1160		mg/kg	OFS-237-7	10 / 10	-
Off-site Soil Area 237	BERYLLIUM	0.43	J	1.2	J	mg/kg	OFS-237-7	10 / 10	-
Off-site Soil Area 237	CADMIUM	0.44	J	1.4	J	mg/kg	OFS-237-7	8 / 10	0.13 - 0.29
Off-site Soil Area 237	CALCIUM	1940		10500		mg/kg	OFS-237-6	10 / 10	-
Off-site Soil Area 237	CHROMIUM	25.8		55.2		mg/kg	OFS-237-8	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 237	COBALT	16.2		22.7		mg/kg	OFS-237-4	10 / 10	-
Off-site Soil Area 237	COPPER	51.6		256		mg/kg	OFS-237-8	10 / 10	-
Off-site Soil Area 237	CYANIDE	0.23	J	0.7	J	mg/kg	OFS-237-1	8 / 10	2.6 - 2.6
Off-site Soil Area 237	IRON	22000		31700		mg/kg	OFS-237-5	10 / 10	-
Off-site Soil Area 237	LEAD	20.9		80.1		mg/kg	OFS-237-2	10 / 10	-
Off-site Soil Area 237	MAGNESIUM	4120		9200		mg/kg	OFS-237-7	10 / 10	-
Off-site Soil Area 237	MANGANESE	807		2350		mg/kg	OFS-237-5	10 / 10	-
Off-site Soil Area 237	MERCURY	0.12		2.4		mg/kg	OFS-237-7	6 / 10	0.042 - 0.11
Off-site Soil Area 237	NICKEL	27.2		98		mg/kg	OFS-237-7	10 / 10	-
Off-site Soil Area 237	POTASSIUM	1840		2970		mg/kg	OFS-237-1	10 / 10	-
Off-site Soil Area 237	THALLIUM	0.49	J	0.77	J	mg/kg	OFS-237-2	4 / 10	2.6 - 2.6
Off-site Soil Area 237	VANADIUM	48.3		68		mg/kg	OFS-237-5	10 / 10	-
Off-site Soil Area 237	ZINC	63.9		167		mg/kg	OFS-237-8	10 / 10	-
Off-site Soil Area 238	ALUMINUM	11500		15000		mg/kg	OFS-238-9	10 / 10	-
Off-site Soil Area 238	ANTIMONY	0.94	J	1.4	J	mg/kg	OFS-238-1	9 / 10	1.4 - 1.4
Off-site Soil Area 238	ARSENIC	14.1		21.9		mg/kg	OFS-238-2	10 / 10	-
Off-site Soil Area 238	BARIUM	137		343		mg/kg	OFS-238-9	10 / 10	-
Off-site Soil Area 238	BERYLLIUM	0.52		0.73		mg/kg	OFS-238-9	10 / 10	-
Off-site Soil Area 238	CADMIUM	0.94		1.5		mg/kg	OFS-238-5	10 / 10	-
Off-site Soil Area 238	CALCIUM	4620		30300		mg/kg	OFS-238-6	10 / 10	-
Off-site Soil Area 238	CHROMIUM	12.2		20.4		mg/kg	OFS-238-9	10 / 10	-
Off-site Soil Area 238	COBALT	11.4		13.4		mg/kg	OFS-238-7	10 / 10	-
Off-site Soil Area 238	COPPER	43.6		112		mg/kg	OFS-238-6	10 / 10	-
Off-site Soil Area 238	IRON	19300		22800		mg/kg	OFS-238-9	10 / 10	-
Off-site Soil Area 238	LEAD	22		63.4		mg/kg	OFS-238-7	10 / 10	-
Off-site Soil Area 238	MAGNESIUM	5180		6940		mg/kg	OFS-238-1	10 / 10	-
Off-site Soil Area 238	MANGANESE	695	J	983		mg/kg	OFS-238-9	10 / 10	-
Off-site Soil Area 238	MERCURY	0.036	J	0.2		mg/kg	OFS-238-5	10 / 10	-
Off-site Soil Area 238	NICKEL	13.2		30.5		mg/kg	OFS-238-7	10 / 10	-
Off-site Soil Area 238	POTASSIUM	1580	J+	2780	J+	mg/kg	OFS-238-5	10 / 10	-
Off-site Soil Area 238	SODIUM	654		654		mg/kg	OFS-238-9	1 / 10	73.8 - 319
Off-site Soil Area 238	THALLIUM	0.058	J	0.058	J	mg/kg	OFS-238-5	1 / 10	2.5 - 2.7
Off-site Soil Area 238	VANADIUM	39.4		46.5		mg/kg	OFS-238-9	10 / 10	-
Off-site Soil Area 238	ZINC	67.3		173		mg/kg	OFS-238-6	10 / 10	-
Off-site Soil Area 239	ALUMINUM	5990		21000		mg/kg	OFS-239-9	10 / 10	-
Off-site Soil Area 239	ANTIMONY	0.89	J	1.5	J	mg/kg	OFS-239-2	9 / 10	1.4 - 1.4
Off-site Soil Area 239	ARSENIC	5.6		26.3		mg/kg	OFS-239-2	10 / 10	-
Off-site Soil Area 239	BARIUM	84.5		322		mg/kg	OFS-239-7	10 / 10	-
Off-site Soil Area 239	BERYLLIUM	0.58		0.87		mg/kg	OFS-239-9	8 / 10	0.3 - 0.48
Off-site Soil Area 239	CADMIUM	0.54		2.3		mg/kg	OFS-239-2	10 / 10	-
Off-site Soil Area 239	CALCIUM	6450		24500		mg/kg	OFS-239-8	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 239	CHROMIUM	9.7		35.5		mg/kg	OFS-239-9	10 / 10	-
Off-site Soil Area 239	COBALT	5.2		17.2		mg/kg	OFS-239-9	10 / 10	-
Off-site Soil Area 239	COPPER	29.2		227		mg/kg	OFS-239-2	10 / 10	-
Off-site Soil Area 239	CYANIDE	0.2	J	0.31	J	mg/kg	OFS-239-3	2 / 10	2.5 - 3.1
Off-site Soil Area 239	IRON	9730		31300		mg/kg	OFS-239-9	10 / 10	-
Off-site Soil Area 239	LEAD	10.4		87.3		mg/kg	OFS-239-2	10 / 10	-
Off-site Soil Area 239	MAGNESIUM	3410		10600		mg/kg	OFS-239-6	10 / 10	-
Off-site Soil Area 239	MANGANESE	317	J	1580	J	mg/kg	OFS-239-1	10 / 10	-
Off-site Soil Area 239	MERCURY	0.019	J	0.084	J	mg/kg	OFS-239-2	9 / 10	0.1 - 0.12
Off-site Soil Area 239	NICKEL	11.2		40.1		mg/kg	OFS-239-9	10 / 10	-
Off-site Soil Area 239	POTASSIUM	1670	J+	4090	J+	mg/kg	OFS-239-4	10 / 10	-
Off-site Soil Area 239	THALLIUM	0.043	J	0.35	J	mg/kg	OFS-239-1	3 / 10	2.5 - 2.6
Off-site Soil Area 239	VANADIUM	22.2		65.8		mg/kg	OFS-239-6	10 / 10	-
Off-site Soil Area 239	ZINC	47.4		287		mg/kg	OFS-239-2	10 / 10	-
Off-site Soil Area 240	ALUMINUM	8910		20400		mg/kg	OFS-240-1	10 / 10	-
Off-site Soil Area 240	ARSENIC	8.3	J	34.2		mg/kg	OFS-240-9	10 / 10	-
Off-site Soil Area 240	BARIUM	186		309		mg/kg	OFS-240-3	10 / 10	-
Off-site Soil Area 240	BERYLLIUM	0.53		0.75		mg/kg	OFS-240-1	8 / 10	0.47 - 0.5
Off-site Soil Area 240	CADMIUM	1.4		3.8		mg/kg	OFS-240-9	10 / 10	-
Off-site Soil Area 240	CALCIUM	4000		15600		mg/kg	OFS-240-6	10 / 10	-
Off-site Soil Area 240	CHROMIUM	15.1		27.5		mg/kg	OFS-240-1	10 / 10	-
Off-site Soil Area 240	COBALT	12.7		16.8		mg/kg	OFS-240-1	10 / 10	-
Off-site Soil Area 240	COPPER	42.6		245		mg/kg	OFS-240-1	10 / 10	-
Off-site Soil Area 240	CYANIDE	0.15	J	0.34	J	mg/kg	OFS-240-7	8 / 10	2.5 - 2.5
Off-site Soil Area 240	IRON	16200		31900		mg/kg	OFS-240-1	10 / 10	-
Off-site Soil Area 240	LEAD	10.1		112		mg/kg	OFS-240-9	10 / 10	-
Off-site Soil Area 240	MAGNESIUM	4240		9430		mg/kg	OFS-240-1	10 / 10	-
Off-site Soil Area 240	MANGANESE	1030		1610		mg/kg	OFS-240-1	10 / 10	-
Off-site Soil Area 240	MERCURY	0.013	J	0.63		mg/kg	OFS-240-9	9 / 10	0.11 - 0.11
Off-site Soil Area 240	NICKEL	19.4		35.4		mg/kg	OFS-240-1	10 / 10	-
Off-site Soil Area 240	POTASSIUM	1600	J+	4710	J+	mg/kg	OFS-240-2	10 / 10	-
Off-site Soil Area 240	SELENIUM	0.16	J	0.63	J	mg/kg	OFS-240-6	6 / 10	3.5 - 4
Off-site Soil Area 240	SILVER	0.077	J	0.59	J	mg/kg	OFS-240-6	4 / 10	0.52 - 1.1
Off-site Soil Area 240	SODIUM	40.6	J	327	J	mg/kg	OFS-240-1	10 / 10	-
Off-site Soil Area 240	VANADIUM	30		55.5		mg/kg	OFS-240-1	10 / 10	-
Off-site Soil Area 240	ZINC	60.6		816		mg/kg	OFS-240-9	10 / 10	-
Off-site Soil Area 241	ALUMINUM	10100		18300		mg/kg	OFS-241-3	10 / 10	-
Off-site Soil Area 241	ANTIMONY	0.25	J	0.26	J	mg/kg	OFS-241-7	2 / 10	6 - 6.2
Off-site Soil Area 241	ARSENIC	11		28.7		mg/kg	OFS-241-7	10 / 10	-
Off-site Soil Area 241	BARIUM	117		185		mg/kg	OFS-241-2	10 / 10	-
Off-site Soil Area 241	BERYLLIUM	0.24	J	0.55	J	mg/kg	OFS-241-3	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 241	CADMIUM	0.18	J	0.27	J	mg/kg	OFS-241-1	2 / 10	0.04 - 0.49
Off-site Soil Area 241	CALCIUM	4940		6580		mg/kg	OFS-241-3	10 / 10	-
Off-site Soil Area 241	CHROMIUM	11.3		18.9		mg/kg	OFS-241-3	10 / 10	-
Off-site Soil Area 241	COBALT	7.2		12.4		mg/kg	OFS-241-3	10 / 10	-
Off-site Soil Area 241	COPPER	18.3		51.3		mg/kg	OFS-241-7	10 / 10	-
Off-site Soil Area 241	CYANIDE	0.23	J	0.35	J	mg/kg	OFS-241-7	3 / 10	2.5 - 2.6
Off-site Soil Area 241	IRON	17200		23700		mg/kg	OFS-241-3	10 / 10	-
Off-site Soil Area 241	LEAD	9.8		37.6		mg/kg	OFS-241-7	10 / 10	-
Off-site Soil Area 241	MAGNESIUM	4860		7260		mg/kg	OFS-241-3	10 / 10	-
Off-site Soil Area 241	MANGANESE	423		608		mg/kg	OFS-241-3	10 / 10	-
Off-site Soil Area 241	MERCURY	0.041	J	0.13		mg/kg	OFS-241-7	9 / 10	0.1 - 0.1
Off-site Soil Area 241	NICKEL	12.3		19.2		mg/kg	OFS-241-3	10 / 10	-
Off-site Soil Area 241	POTASSIUM	1790		3030		mg/kg	OFS-241-7	10 / 10	-
Off-site Soil Area 241	SODIUM	42.1	J	185	J	mg/kg	OFS-241-9	10 / 10	-
Off-site Soil Area 241	VANADIUM	26.6		42		mg/kg	OFS-241-2	10 / 10	-
Off-site Soil Area 241	ZINC	63.2		143		mg/kg	OFS-241-7	10 / 10	-
Off-site Soil Area 242	ALUMINUM	11000		25400	J	mg/kg	OFS-242-9	10 / 10	-
Off-site Soil Area 242	ANTIMONY	0.22	J	0.64	J	mg/kg	OFS-242-5	7 / 10	6 - 6.4
Off-site Soil Area 242	ARSENIC	40.5		82.8		mg/kg	OFS-242-1	10 / 10	-
Off-site Soil Area 242	BARIUM	159		288		mg/kg	OFS-242-7	10 / 10	-
Off-site Soil Area 242	BERYLLIUM	0.37	J	0.76	J	mg/kg	OFS-242-9	10 / 10	-
Off-site Soil Area 242	CADMIUM	0.52	J	0.68	J	mg/kg	OFS-242-7	2 / 10	0.026 - 0.5
Off-site Soil Area 242	CALCIUM	2390		6840		mg/kg	OFS-242-7	10 / 10	-
Off-site Soil Area 242	CHROMIUM	27.4		52.3		mg/kg	OFS-242-9	10 / 10	-
Off-site Soil Area 242	COBALT	14		26		mg/kg	OFS-242-9	10 / 10	-
Off-site Soil Area 242	COPPER	46.3		89.2		mg/kg	OFS-242-7	10 / 10	-
Off-site Soil Area 242	CYANIDE	0.22	J	0.45	J	mg/kg	OFS-242-1	7 / 10	2.5 - 2.5
Off-site Soil Area 242	IRON	27700		39200	J	mg/kg	OFS-242-9	10 / 10	-
Off-site Soil Area 242	LEAD	15.1		40.4		mg/kg	OFS-242-2	10 / 10	-
Off-site Soil Area 242	MAGNESIUM	5940		10100	J	mg/kg	OFS-242-9	10 / 10	-
Off-site Soil Area 242	MANGANESE	810		1410		mg/kg	OFS-242-5	10 / 10	-
Off-site Soil Area 242	MERCURY	0.048	J	0.15		mg/kg	OFS-242-1	8 / 10	0.1 - 0.1
Off-site Soil Area 242	NICKEL	32.9		59	J	mg/kg	OFS-242-9	10 / 10	-
Off-site Soil Area 242	POTASSIUM	2540		4300		mg/kg	OFS-242-7	10 / 10	-
Off-site Soil Area 242	THALLIUM	0.27	J	0.94	J	mg/kg	OFS-242-5	8 / 10	2.5 - 2.5
Off-site Soil Area 242	VANADIUM	57.3		82.1	J	mg/kg	OFS-242-9	10 / 10	-
Off-site Soil Area 242	ZINC	73		133		mg/kg	OFS-242-3	10 / 10	-
Off-site Soil Area 243	ALUMINUM	14500	J	23400	J	mg/kg	OFS-243-1	10 / 10	-
Off-site Soil Area 243	ARSENIC	16.8	J+	28.8	J+	mg/kg	OFS-243-1	10 / 10	-
Off-site Soil Area 243	BARIUM	171	J	486	J	mg/kg	OFS-243-8	10 / 10	-
Off-site Soil Area 243	BERYLLIUM	0.42	J	0.78	J	mg/kg	OFS-243-1	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 243	CADMIUM	0.58		0.69		mg/kg	OFS-243-4	5 / 10	0.16 - 0.37
Off-site Soil Area 243	CALCIUM	10600	J	30700	J	mg/kg	OFS-243-1	10 / 10	-
Off-site Soil Area 243	CHROMIUM	18.3		38.6		mg/kg	OFS-243-1	10 / 10	-
Off-site Soil Area 243	COBALT	12.6		20.1		mg/kg	OFS-243-2	10 / 10	-
Off-site Soil Area 243	COPPER	39.4	J	82.2	J	mg/kg	OFS-243-2	10 / 10	-
Off-site Soil Area 243	CYANIDE	0.23	J	0.47	J	mg/kg	OFS-243-2	6 / 10	2.5 - 2.7
Off-site Soil Area 243	IRON	22200	J	30300	J	mg/kg	OFS-243-1	10 / 10	-
Off-site Soil Area 243	LEAD	15.8		89.6		mg/kg	OFS-243-1	10 / 10	-
Off-site Soil Area 243	MAGNESIUM	6160	J	11100	J	mg/kg	OFS-243-1	10 / 10	-
Off-site Soil Area 243	MANGANESE	534	J	1100	J	mg/kg	OFS-243-8	10 / 10	-
Off-site Soil Area 243	MERCURY	0.055	J	0.55		mg/kg	OFS-243-1	9 / 10	0.1 - 0.1
Off-site Soil Area 243	NICKEL	20.1	J	45.1	J	mg/kg	OFS-243-1	10 / 10	-
Off-site Soil Area 243	POTASSIUM	1810	J	3890	J	mg/kg	OFS-243-1	10 / 10	-
Off-site Soil Area 243	SODIUM	1140		1140		mg/kg	OFS-243-1	1 / 10	97.9 - 275
Off-site Soil Area 243	VANADIUM	40.4	J	58.1	J	mg/kg	OFS-243-2	10 / 10	-
Off-site Soil Area 243	ZINC	119		383		mg/kg	OFS-243-8	10 / 10	-
Off-site Soil Area 244	ALUMINUM	12000		19100	J	mg/kg	OFS-244-2	10 / 10	-
Off-site Soil Area 244	ARSENIC	14.6		339	J+	mg/kg	OFS-244-2	10 / 10	-
Off-site Soil Area 244	BARIUM	138		240	J	mg/kg	OFS-244-2	10 / 10	-
Off-site Soil Area 244	BERYLLIUM	0.22	J	0.59	J	mg/kg	OFS-244-1	10 / 10	-
Off-site Soil Area 244	CADMIUM	0.4	J	0.67		mg/kg	OFS-244-4	6 / 10	0.033 - 0.5
Off-site Soil Area 244	CALCIUM	7040	J	33300	J	mg/kg	OFS-244-2	10 / 10	-
Off-site Soil Area 244	CHROMIUM	12.9		175		mg/kg	OFS-244-2	10 / 10	-
Off-site Soil Area 244	COBALT	9.2		42.1		mg/kg	OFS-244-2	10 / 10	-
Off-site Soil Area 244	COPPER	29.7		83.4	J	mg/kg	OFS-244-2	10 / 10	-
Off-site Soil Area 244	CYANIDE	0.27	J	1.2	J	mg/kg	OFS-244-7	8 / 10	2.5 - 2.6
Off-site Soil Area 244	IRON	17100		57100	J	mg/kg	OFS-244-2	10 / 10	-
Off-site Soil Area 244	LEAD	11.4		40.3		mg/kg	OFS-244-3	10 / 10	-
Off-site Soil Area 244	MAGNESIUM	5430	J	12100	J	mg/kg	OFS-244-2	10 / 10	-
Off-site Soil Area 244	MANGANESE	467	J	3900	J	mg/kg	OFS-244-2	10 / 10	-
Off-site Soil Area 244	MERCURY	0.054	J	0.19		mg/kg	OFS-244-8	6 / 10	0.1 - 0.1
Off-site Soil Area 244	NICKEL	12.8		144	J	mg/kg	OFS-244-2	10 / 10	-
Off-site Soil Area 244	POTASSIUM	1660	J	4100	J	mg/kg	OFS-244-4	10 / 10	-
Off-site Soil Area 244	SELENIUM	1.4	J	1.8	J	mg/kg	OFS-244-6	4 / 10	3.5 - 3.6
Off-site Soil Area 244	SODIUM	71.2	J	179	J	mg/kg	OFS-244-7	4 / 10	45.9 - 410
Off-site Soil Area 244	VANADIUM	27.9	J	120	J	mg/kg	OFS-244-2	10 / 10	-
Off-site Soil Area 244	ZINC	63.3		295		mg/kg	OFS-244-3	10 / 10	-
Off-site Soil Area 245	ALUMINUM	9020		21700		mg/kg	OFS-245-4	10 / 10	-
Off-site Soil Area 245	ARSENIC	7.8		18.2		mg/kg	OFS-245-4	10 / 10	-
Off-site Soil Area 245	BARIUM	91.3		278		mg/kg	OFS-245-3	10 / 10	-
Off-site Soil Area 245	BERYLLIUM	0.061	J	0.061	J	mg/kg	OFS-245-7	1 / 10	0.5 - 0.54

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 245	CADMIUM	0.25	J	0.73		mg/kg	OFS-245-4	8 / 10	0.43 - 0.45
Off-site Soil Area 245	CALCIUM	4400		12300		mg/kg	OFS-245-3	10 / 10	-
Off-site Soil Area 245	CHROMIUM	11.4		33.6		mg/kg	OFS-245-3	10 / 10	-
Off-site Soil Area 245	COBALT	10.2		24.6		mg/kg	OFS-245-3	10 / 10	-
Off-site Soil Area 245	COPPER	16.3		42.1		mg/kg	OFS-245-8	10 / 10	-
Off-site Soil Area 245	CYANIDE	0.37	J	0.37	J	mg/kg	OFS-245-8	1 / 10	2.5 - 2.7
Off-site Soil Area 245	IRON	12800		32200		mg/kg	OFS-245-4	10 / 10	-
Off-site Soil Area 245	LEAD	5.5		10.9		mg/kg	OFS-245-4	10 / 10	-
Off-site Soil Area 245	MAGNESIUM	5140		18100		mg/kg	OFS-245-3	10 / 10	-
Off-site Soil Area 245	MANGANESE	288		997		mg/kg	OFS-245-8	10 / 10	-
Off-site Soil Area 245	MERCURY	0.043	J	0.047	J	mg/kg	OFS-245-2	2 / 10	0.1 - 0.11
Off-site Soil Area 245	NICKEL	11.3		147		mg/kg	OFS-245-3	10 / 10	-
Off-site Soil Area 245	POTASSIUM	1100		1980		mg/kg	OFS-245-4	10 / 10	-
Off-site Soil Area 245	SELENIUM	1.3	J	2.4	J	mg/kg	OFS-245-4	10 / 10	-
Off-site Soil Area 245	SODIUM	56.4	J	527		mg/kg	OFS-245-3	10 / 10	-
Off-site Soil Area 245	VANADIUM	25.6	J	59.2	J	mg/kg	OFS-245-8	10 / 10	-
Off-site Soil Area 245	ZINC	33.7		79.9		mg/kg	OFS-245-4	10 / 10	-
Off-site Soil Area 246	ALUMINUM	9440		16000		mg/kg	OFS-246-2	10 / 10	-
Off-site Soil Area 246	ANTIMONY	8.5	J	8.5	J	mg/kg	OFS-246-4	1 / 10	0.6 - 6.4
Off-site Soil Area 246	ARSENIC	23.6		525		mg/kg	OFS-246-4	10 / 10	-
Off-site Soil Area 246	BARIUM	103		316		mg/kg	OFS-246-1	10 / 10	-
Off-site Soil Area 246	BERYLLIUM	0.046	J	0.21	J	mg/kg	OFS-246-2	10 / 10	-
Off-site Soil Area 246	CADMIUM	0.95		9.3		mg/kg	OFS-246-4	10 / 10	-
Off-site Soil Area 246	CALCIUM	2340		13400		mg/kg	OFS-246-1	10 / 10	-
Off-site Soil Area 246	CHROMIUM	16.3		30.5		mg/kg	OFS-246-1	10 / 10	-
Off-site Soil Area 246	COBALT	8.8		15.1		mg/kg	OFS-246-2	10 / 10	-
Off-site Soil Area 246	COPPER	68.8		260		mg/kg	OFS-246-1	10 / 10	-
Off-site Soil Area 246	CYANIDE	0.26	J	1.2	J	mg/kg	OFS-246-1	10 / 10	-
Off-site Soil Area 246	IRON	15900		32600		mg/kg	OFS-246-4	10 / 10	-
Off-site Soil Area 246	LEAD	34.6		2120		mg/kg	OFS-246-4	10 / 10	-
Off-site Soil Area 246	MAGNESIUM	3810		6930		mg/kg	OFS-246-2	10 / 10	-
Off-site Soil Area 246	MANGANESE	381		808		mg/kg	OFS-246-1	10 / 10	-
Off-site Soil Area 246	MERCURY	0.12		5		mg/kg	OFS-246-4	9 / 10	0.1 - 0.1
Off-site Soil Area 246	NICKEL	14.1		29.2		mg/kg	OFS-246-1	10 / 10	-
Off-site Soil Area 246	POTASSIUM	2000		4520		mg/kg	OFS-246-2	10 / 10	-
Off-site Soil Area 246	SELENIUM	1.7	J	8.4		mg/kg	OFS-246-4	10 / 10	-
Off-site Soil Area 246	SILVER	0.43	J	15.1		mg/kg	OFS-246-4	7 / 10	1 - 1
Off-site Soil Area 246	SODIUM	63.8	J	359	J	mg/kg	OFS-246-9	10 / 10	-
Off-site Soil Area 246	VANADIUM	28.2		49.2		mg/kg	OFS-246-7	10 / 10	-
Off-site Soil Area 246	ZINC	139		2010		mg/kg	OFS-246-4	10 / 10	-
Off-site Soil Area 247	ALUMINUM	6900		20000		mg/kg	OFS-247-5	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 247	ANTIMONY	6.2	J	35.2	J	mg/kg	OFS-247-1	2 / 10	6 - 6.2
Off-site Soil Area 247	ARSENIC	12.5		785		mg/kg	OFS-247-1	10 / 10	-
Off-site Soil Area 247	BARIUM	79.2		259		mg/kg	OFS-247-5	10 / 10	-
Off-site Soil Area 247	BERYLLIUM	0.18	J	0.52		mg/kg	OFS-247-5	9 / 10	0.53 - 0.53
Off-site Soil Area 247	CADMIUM	0.44	J	4.4		mg/kg	OFS-247-7	10 / 10	-
Off-site Soil Area 247	CALCIUM	2330		13300		mg/kg	OFS-247-8	10 / 10	-
Off-site Soil Area 247	CHROMIUM	8.1		24.7		mg/kg	OFS-247-1	10 / 10	-
Off-site Soil Area 247	COBALT	5.7		14.8		mg/kg	OFS-247-1	10 / 10	-
Off-site Soil Area 247	COPPER	31.9		126		mg/kg	OFS-247-5	10 / 10	-
Off-site Soil Area 247	CYANIDE	0.26	J	0.66	J	mg/kg	OFS-247-5	8 / 10	2.5 - 2.5
Off-site Soil Area 247	IRON	17700		28500		mg/kg	OFS-247-1	10 / 10	-
Off-site Soil Area 247	LEAD	16.1		1170		mg/kg	OFS-247-1	10 / 10	-
Off-site Soil Area 247	MAGNESIUM	3230		7250		mg/kg	OFS-247-5	10 / 10	-
Off-site Soil Area 247	MANGANESE	246		644		mg/kg	OFS-247-5	10 / 10	-
Off-site Soil Area 247	MERCURY	0.045	J	4.4		mg/kg	OFS-247-1	8 / 10	0.1 - 0.1
Off-site Soil Area 247	NICKEL	8.7		23.5		mg/kg	OFS-247-1	10 / 10	-
Off-site Soil Area 247	POTASSIUM	1250		4930		mg/kg	OFS-247-5	10 / 10	-
Off-site Soil Area 247	SELENIUM	1.6	J	15.6		mg/kg	OFS-247-1	10 / 10	-
Off-site Soil Area 247	SILVER	0.42	J	2.2		mg/kg	OFS-247-1	4 / 10	1 - 1
Off-site Soil Area 247	SODIUM	36.2	J	291	J	mg/kg	OFS-247-1	10 / 10	-
Off-site Soil Area 247	VANADIUM	22.3		40.2		mg/kg	OFS-247-1	10 / 10	-
Off-site Soil Area 247	ZINC	66.6		769		mg/kg	OFS-247-7	10 / 10	-
Off-site Soil Area 248	ALUMINUM	15200		21900		mg/kg	OFS-248-8	10 / 10	-
Off-site Soil Area 248	ARSENIC	15.6	J	38.1	J	mg/kg	OFS-248-2	10 / 10	-
Off-site Soil Area 248	BARIUM	186	J	401		mg/kg	OFS-248-1	10 / 10	-
Off-site Soil Area 248	BERYLLIUM	0.29	J	0.79	J	mg/kg	OFS-248-8	10 / 10	-
Off-site Soil Area 248	CADMIUM	0.11	J	6.7		mg/kg	OFS-248-4	10 / 10	-
Off-site Soil Area 248	CALCIUM	7780	J	84400		mg/kg	OFS-248-1	10 / 10	-
Off-site Soil Area 248	CHROMIUM	23.1		35		mg/kg	OFS-248-3	10 / 10	-
Off-site Soil Area 248	COBALT	14.4		21.1		mg/kg	OFS-248-8	10 / 10	-
Off-site Soil Area 248	COPPER	36.5		589		mg/kg	OFS-248-2	10 / 10	-
Off-site Soil Area 248	CYANIDE	0.22	J	0.69	J	mg/kg	OFS-248-7	8 / 10	2.5 - 2.5
Off-site Soil Area 248	IRON	22400		29300		mg/kg	OFS-248-8	10 / 10	-
Off-site Soil Area 248	LEAD	9.9		201		mg/kg	OFS-248-2	10 / 10	-
Off-site Soil Area 248	MAGNESIUM	6630		9550		mg/kg	OFS-248-9	10 / 10	-
Off-site Soil Area 248	MANGANESE	1080		2300		mg/kg	OFS-248-2	10 / 10	-
Off-site Soil Area 248	MERCURY	0.049	J	0.25		mg/kg	OFS-248-3	8 / 10	0.1 - 0.11
Off-site Soil Area 248	NICKEL	31.9		48		mg/kg	OFS-248-3	10 / 10	-
Off-site Soil Area 248	POTASSIUM	2630		4720		mg/kg	OFS-248-5	10 / 10	-
Off-site Soil Area 248	SELENIUM	1.4	J	2.1	J	mg/kg	OFS-248-1	2 / 10	3.5 - 3.6
Off-site Soil Area 248	SODIUM	42.3	J	1080		mg/kg	OFS-248-6	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 248	VANADIUM	39.4		53.6		mg/kg	OFS-248-8	10 / 10	-
Off-site Soil Area 248	ZINC	54.7		392		mg/kg	OFS-248-4	10 / 10	-
Off-site Soil Area 249	ALUMINUM	13900		18000		mg/kg	OFS-249-1	10 / 10	-
Off-site Soil Area 249	ARSENIC	9.2	J	15.4	J	mg/kg	OFS-249-2	10 / 10	-
Off-site Soil Area 249	BARIUM	152	J	479	J	mg/kg	OFS-249-1	10 / 10	-
Off-site Soil Area 249	BERYLLIUM	0.58	J	0.74	J	mg/kg	OFS-249-1	10 / 10	-
Off-site Soil Area 249	CALCIUM	4490	J	22800	J	mg/kg	OFS-249-1	10 / 10	-
Off-site Soil Area 249	CHROMIUM	15.3		23.7		mg/kg	OFS-249-1	10 / 10	-
Off-site Soil Area 249	COBALT	11		14.8		mg/kg	OFS-249-2	10 / 10	-
Off-site Soil Area 249	COPPER	20.9		25.2		mg/kg	OFS-249-2	10 / 10	-
Off-site Soil Area 249	CYANIDE	0.37	J	0.37	J	mg/kg	OFS-249-1	1 / 10	2.5 - 2.7
Off-site Soil Area 249	IRON	20100		27200		mg/kg	OFS-249-8	10 / 10	-
Off-site Soil Area 249	LEAD	9.2		19.3		mg/kg	OFS-249-2	10 / 10	-
Off-site Soil Area 249	MAGNESIUM	4640		6530		mg/kg	OFS-249-1	10 / 10	-
Off-site Soil Area 249	MANGANESE	489		1130		mg/kg	OFS-249-2	10 / 10	-
Off-site Soil Area 249	NICKEL	15.8		22.1		mg/kg	OFS-249-1	10 / 10	-
Off-site Soil Area 249	POTASSIUM	1260		2140		mg/kg	OFS-249-3	10 / 10	-
Off-site Soil Area 249	SODIUM	107	J	490	J	mg/kg	OFS-249-1	10 / 10	-
Off-site Soil Area 249	VANADIUM	34.8		51		mg/kg	OFS-249-8	10 / 10	-
Off-site Soil Area 249	ZINC	45.3		56.9		mg/kg	OFS-249-2	10 / 10	-
Off-site Soil Area 250	ALUMINUM	8880		13700		mg/kg	OFS-250-4	10 / 10	-
Off-site Soil Area 250	ARSENIC	12.9		35		mg/kg	OFS-250-4	10 / 10	-
Off-site Soil Area 250	BARIUM	79.5		142	J	mg/kg	OFS-250-1	10 / 10	-
Off-site Soil Area 250	BERYLLIUM	0.25	J	0.41	J	mg/kg	OFS-250-4	10 / 10	-
Off-site Soil Area 250	CADMIUM	0.094	J	1.9		mg/kg	OFS-250-2	5 / 10	0.077 - 0.34
Off-site Soil Area 250	CALCIUM	3180		10500		mg/kg	OFS-250-1	10 / 10	-
Off-site Soil Area 250	CHROMIUM	6.9		16.3		mg/kg	OFS-250-4	10 / 10	-
Off-site Soil Area 250	COBALT	9.5		13.2		mg/kg	OFS-250-1	10 / 10	-
Off-site Soil Area 250	COPPER	27.5		167		mg/kg	OFS-250-4	10 / 10	-
Off-site Soil Area 250	CYANIDE	0.27	J	0.39	J	mg/kg	OFS-250-5	3 / 10	2.5 - 2.7
Off-site Soil Area 250	IRON	17100		22000		mg/kg	OFS-250-9	10 / 10	-
Off-site Soil Area 250	LEAD	15.5	J	61.4	J	mg/kg	OFS-250-4	10 / 10	-
Off-site Soil Area 250	MAGNESIUM	3530		5320		mg/kg	OFS-250-6	10 / 10	-
Off-site Soil Area 250	MANGANESE	461		555		mg/kg	OFS-250-8	10 / 10	-
Off-site Soil Area 250	MERCURY	0.064	J	0.46		mg/kg	OFS-250-2	8 / 10	0.1 - 0.1
Off-site Soil Area 250	NICKEL	8.6		15.7		mg/kg	OFS-250-4	10 / 10	-
Off-site Soil Area 250	POTASSIUM	1970		3630		mg/kg	OFS-250-8	10 / 10	-
Off-site Soil Area 250	SODIUM	38.9	J	38.9	J	mg/kg	OFS-250-1	1 / 10	36.2 - 58.8
Off-site Soil Area 250	VANADIUM	29.7		42.6		mg/kg	OFS-250-1	10 / 10	-
Off-site Soil Area 250	ZINC	60		172		mg/kg	OFS-250-5	10 / 10	-
Off-site Soil Area 251	ALUMINUM	10100		21500		mg/kg	OFS-251-2	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 251	ARSENIC	12		170		mg/kg	OFS-251-3	10 / 10	-
Off-site Soil Area 251	BARIUM	83.9		279		mg/kg	OFS-251-4	10 / 10	-
Off-site Soil Area 251	BERYLLIUM	0.23	J	0.55	J	mg/kg	OFS-251-2	10 / 10	-
Off-site Soil Area 251	CADMIUM	0.027	J	0.027	J	mg/kg	OFS-251-9	1 / 10	0.035 - 0.53
Off-site Soil Area 251	CALCIUM	9960		37800		mg/kg	OFS-251-3	10 / 10	-
Off-site Soil Area 251	CHROMIUM	12		124		mg/kg	OFS-251-3	10 / 10	-
Off-site Soil Area 251	COBALT	11.1		30.7		mg/kg	OFS-251-3	10 / 10	-
Off-site Soil Area 251	COPPER	24		64.6		mg/kg	OFS-251-3	10 / 10	-
Off-site Soil Area 251	CYANIDE	0.22	J	0.22	J	mg/kg	OFS-251-1	0 / 10	2.5 - 2.8
Off-site Soil Area 251	IRON	20400		40800		mg/kg	OFS-251-3	10 / 10	-
Off-site Soil Area 251	LEAD	7.3	J	15.3	J	mg/kg	OFS-251-8	10 / 10	-
Off-site Soil Area 251	MAGNESIUM	5490		12000		mg/kg	OFS-251-3	10 / 10	-
Off-site Soil Area 251	MANGANESE	545		4500		mg/kg	OFS-251-3	10 / 10	-
Off-site Soil Area 251	MERCURY	0.044	J	0.092	J	mg/kg	OFS-251-5	5 / 10	0.1 - 0.11
Off-site Soil Area 251	NICKEL	11.9		99.3		mg/kg	OFS-251-3	10 / 10	-
Off-site Soil Area 251	POTASSIUM	1140		2090		mg/kg	OFS-251-8	10 / 10	-
Off-site Soil Area 251	SODIUM	70.2	J	70.2	J	mg/kg	OFS-251-9	1 / 10	76.7 - 250
Off-site Soil Area 251	VANADIUM	37.1		93.3		mg/kg	OFS-251-3	10 / 10	-
Off-site Soil Area 251	ZINC	51.3		84.2		mg/kg	OFS-251-8	10 / 10	-
Off-site Soil Area 252	ALUMINUM	11100		19200		mg/kg	OFS-252-8	10 / 10	-
Off-site Soil Area 252	ANTIMONY	0.29	J	0.77	J	mg/kg	OFS-252-3	10 / 10	-
Off-site Soil Area 252	ARSENIC	22.8		48.9		mg/kg	OFS-252-8	10 / 10	-
Off-site Soil Area 252	BARIUM	107		638		mg/kg	OFS-252-1	10 / 10	-
Off-site Soil Area 252	BERYLLIUM	0.3	J	0.64		mg/kg	OFS-252-1	10 / 10	-
Off-site Soil Area 252	CADMIUM	0.49	J	1.7	J	mg/kg	OFS-252-9	10 / 10	-
Off-site Soil Area 252	CALCIUM	3180		8390		mg/kg	OFS-252-1	10 / 10	-
Off-site Soil Area 252	CHROMIUM	17.9		39.8		mg/kg	OFS-252-8	10 / 10	-
Off-site Soil Area 252	COBALT	10.5		20.9		mg/kg	OFS-252-1	10 / 10	-
Off-site Soil Area 252	COPPER	57.9		113		mg/kg	OFS-252-1	10 / 10	-
Off-site Soil Area 252	CYANIDE	0.21	J	0.41	J	mg/kg	OFS-252-8	8 / 10	0.21 - 2.5
Off-site Soil Area 252	IRON	19600		26700		mg/kg	OFS-252-7	10 / 10	-
Off-site Soil Area 252	LEAD	45.2		140		mg/kg	OFS-252-7	10 / 10	-
Off-site Soil Area 252	MAGNESIUM	3840		7440		mg/kg	OFS-252-1	10 / 10	-
Off-site Soil Area 252	MANGANESE	402		918		mg/kg	OFS-252-9	10 / 10	-
Off-site Soil Area 252	MERCURY	0.13		0.66		mg/kg	OFS-252-7	10 / 10	-
Off-site Soil Area 252	NICKEL	15.5		69.7		mg/kg	OFS-252-1	10 / 10	-
Off-site Soil Area 252	POTASSIUM	2030		2930		mg/kg	OFS-252-6	10 / 10	-
Off-site Soil Area 252	SELENIUM	0.4	J	0.4	J	mg/kg	OFS-252-3	1 / 10	3.5 - 3.7
Off-site Soil Area 252	SILVER	0.11	J	0.34	J	mg/kg	OFS-252-1	6 / 10	1 - 1.1
Off-site Soil Area 252	SODIUM	38.4	J	271	J	mg/kg	OFS-252-1	10 / 10	-
Off-site Soil Area 252	VANADIUM	39.8		55.5		mg/kg	OFS-252-7	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 252	ZINC	128	J	387	J	mg/kg	OFS-252-9	10 / 10	-
Off-site Soil Area 253	ALUMINUM	11400		19600		mg/kg	OFS-253-1	10 / 10	-
Off-site Soil Area 253	ANTIMONY	0.4	J	0.98	J	mg/kg	OFS-253-2	9 / 10	6.7 - 6.7
Off-site Soil Area 253	ARSENIC	36.4		77.8		mg/kg	OFS-253-2	10 / 10	-
Off-site Soil Area 253	BARIUM	116		323		mg/kg	OFS-253-2	10 / 10	-
Off-site Soil Area 253	BERYLLIUM	0.33	J	0.81		mg/kg	OFS-253-1	10 / 10	-
Off-site Soil Area 253	CADMIUM	0.088	J	1.5	J	mg/kg	OFS-253-2	10 / 10	-
Off-site Soil Area 253	CALCIUM	2020	J	4620		mg/kg	OFS-253-1	10 / 10	-
Off-site Soil Area 253	CHROMIUM	21.1		37.8		mg/kg	OFS-253-9	10 / 10	-
Off-site Soil Area 253	COBALT	11.7		21.3		mg/kg	OFS-253-9	10 / 10	-
Off-site Soil Area 253	COPPER	42.6		276		mg/kg	OFS-253-4	10 / 10	-
Off-site Soil Area 253	CYANIDE	0.26	J	0.44	J	mg/kg	OFS-253-9	9 / 10	2.8 - 2.8
Off-site Soil Area 253	IRON	22700		36700		mg/kg	OFS-253-3	10 / 10	-
Off-site Soil Area 253	LEAD	19.2		99.4		mg/kg	OFS-253-2	10 / 10	-
Off-site Soil Area 253	MAGNESIUM	4480	J	6860		mg/kg	OFS-253-1	10 / 10	-
Off-site Soil Area 253	MANGANESE	778		2920		mg/kg	OFS-253-2	10 / 10	-
Off-site Soil Area 253	MERCURY	0.058	J	1.7		mg/kg	OFS-253-1	10 / 10	-
Off-site Soil Area 253	NICKEL	17.6		51.5		mg/kg	OFS-253-9	10 / 10	-
Off-site Soil Area 253	POTASSIUM	1990		2920		mg/kg	OFS-253-5	10 / 10	-
Off-site Soil Area 253	SILVER	0.068	J	0.52	J	mg/kg	OFS-253-2	7 / 10	1 - 1.1
Off-site Soil Area 253	SODIUM	26.3	J	399	J	mg/kg	OFS-253-4	10 / 10	-
Off-site Soil Area 253	THALLIUM	0.15	J	0.77	J	mg/kg	OFS-253-2	10 / 10	-
Off-site Soil Area 253	VANADIUM	42		76		mg/kg	OFS-253-3	10 / 10	-
Off-site Soil Area 253	ZINC	70.1	J	159	J	mg/kg	OFS-253-3	10 / 10	-
Off-site Soil Area 254	ALUMINUM	14400		21400		mg/kg	OFS-254-9	10 / 10	-
Off-site Soil Area 254	ANTIMONY	0.19	J	0.83	J	mg/kg	OFS-254-4	9 / 10	6.1 - 6.1
Off-site Soil Area 254	ARSENIC	25.2		119		mg/kg	OFS-254-4	10 / 10	-
Off-site Soil Area 254	BARIUM	126		202		mg/kg	OFS-254-9	10 / 10	-
Off-site Soil Area 254	BERYLLIUM	0.18	J	0.47	J	mg/kg	OFS-254-9	10 / 10	-
Off-site Soil Area 254	CADMIUM	0.57	J	1	J	mg/kg	OFS-254-4	6 / 10	0.15 - 0.34
Off-site Soil Area 254	CALCIUM	5010		8470		mg/kg	OFS-254-1	10 / 10	-
Off-site Soil Area 254	CHROMIUM	11.1		16.1		mg/kg	OFS-254-1	10 / 10	-
Off-site Soil Area 254	COBALT	11.9		17.2		mg/kg	OFS-254-9	10 / 10	-
Off-site Soil Area 254	COPPER	37.4		97.8		mg/kg	OFS-254-5	10 / 10	-
Off-site Soil Area 254	CYANIDE	0.3	J	0.41	J	mg/kg	OFS-254-1	4 / 10	2.5 - 2.6
Off-site Soil Area 254	IRON	26700		33500		mg/kg	OFS-254-9	10 / 10	-
Off-site Soil Area 254	LEAD	19.4		139		mg/kg	OFS-254-4	10 / 10	-
Off-site Soil Area 254	MAGNESIUM	5580		7940		mg/kg	OFS-254-9	10 / 10	-
Off-site Soil Area 254	MANGANESE	528		853		mg/kg	OFS-254-1	10 / 10	-
Off-site Soil Area 254	MERCURY	0.048	J	0.48		mg/kg	OFS-254-4	10 / 10	-
Off-site Soil Area 254	NICKEL	12.6		16.5		mg/kg	OFS-254-9	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 254	POTASSIUM	1740		4400		mg/kg	OFS-254-2	10 / 10	-
Off-site Soil Area 254	SILVER	0.036	J	0.2	J	mg/kg	OFS-254-4	3 / 10	0.13 - 1
Off-site Soil Area 254	SODIUM	47.3	J	83	J	mg/kg	OFS-254-1	6 / 10	59.1 - 68.4
Off-site Soil Area 254	THALLIUM	0.17	J	0.28	J	mg/kg	OFS-254-6	3 / 10	2.5 - 2.5
Off-site Soil Area 254	VANADIUM	50.9		70.1		mg/kg	OFS-254-9	10 / 10	-
Off-site Soil Area 254	ZINC	90.1		321		mg/kg	OFS-254-4	10 / 10	-
Off-site Soil Area 255	ALUMINUM	12700		21900		mg/kg	OFS-255-9	10 / 10	-
Off-site Soil Area 255	ANTIMONY	0.16	J	0.37	J	mg/kg	OFS-255-4	7 / 10	6.1 - 6.9
Off-site Soil Area 255	ARSENIC	8.5		51.8		mg/kg	OFS-255-6	10 / 10	-
Off-site Soil Area 255	BARIUM	124		189		mg/kg	OFS-255-9	10 / 10	-
Off-site Soil Area 255	BERYLLIUM	0.25	J	0.55	J	mg/kg	OFS-255-1	10 / 10	-
Off-site Soil Area 255	CADMIUM	0.077	J	0.64	J	mg/kg	OFS-255-6	6 / 10	0.074 - 0.45
Off-site Soil Area 255	CALCIUM	4820		7470		mg/kg	OFS-255-9	10 / 10	-
Off-site Soil Area 255	CHROMIUM	11	J	35.5	J	mg/kg	OFS-255-1	10 / 10	-
Off-site Soil Area 255	COBALT	13.1		17.8		mg/kg	OFS-255-9	10 / 10	-
Off-site Soil Area 255	COPPER	28.6		63.3		mg/kg	OFS-255-5	10 / 10	-
Off-site Soil Area 255	CYANIDE	0.21	J	0.33	J	mg/kg	OFS-255-2	7 / 10	0.21 - 2.6
Off-site Soil Area 255	IRON	22300		32100		mg/kg	OFS-255-9	10 / 10	-
Off-site Soil Area 255	LEAD	9.4		64		mg/kg	OFS-255-3	10 / 10	-
Off-site Soil Area 255	MAGNESIUM	5350		8110		mg/kg	OFS-255-9	10 / 10	-
Off-site Soil Area 255	MANGANESE	661		946		mg/kg	OFS-255-9	10 / 10	-
Off-site Soil Area 255	MERCURY	0.046	J	0.25		mg/kg	OFS-255-3	10 / 10	0.1 - 0.1
Off-site Soil Area 255	NICKEL	12.8		27.5		mg/kg	OFS-255-1	10 / 10	-
Off-site Soil Area 255	POTASSIUM	2230		4790		mg/kg	OFS-255-3	10 / 10	-
Off-site Soil Area 255	THALLIUM	0.16	J	0.25	J	mg/kg	OFS-255-9	6 / 10	2.5 - 2.5
Off-site Soil Area 255	VANADIUM	33.4		62		mg/kg	OFS-255-7	10 / 10	-
Off-site Soil Area 255	ZINC	60.7		283		mg/kg	OFS-255-6	10 / 10	-
Off-site Soil Area 256	ALUMINUM	16900		30000		mg/kg	OFS-256-8	10 / 10	-
Off-site Soil Area 256	ANTIMONY	0.2	J	0.32	J	mg/kg	OFS-256-3	2 / 10	6.1 - 6.8
Off-site Soil Area 256	ARSENIC	23.3		36.2		mg/kg	OFS-256-9	10 / 10	-
Off-site Soil Area 256	BARIUM	282		414		mg/kg	OFS-256-1	10 / 10	-
Off-site Soil Area 256	BERYLLIUM	0.23	J	0.75		mg/kg	OFS-256-1	10 / 10	-
Off-site Soil Area 256	CADMIUM	0.53	J	2.6		mg/kg	OFS-256-4	9 / 10	0.56 - 0.56
Off-site Soil Area 256	CALCIUM	5510		9280		mg/kg	OFS-256-2	10 / 10	-
Off-site Soil Area 256	CHROMIUM	29.4	J	47.9		mg/kg	OFS-256-8	10 / 10	-
Off-site Soil Area 256	COBALT	16.3		22.9		mg/kg	OFS-256-6	10 / 10	-
Off-site Soil Area 256	COPPER	50.9		335		mg/kg	OFS-256-4	10 / 10	-
Off-site Soil Area 256	CYANIDE	0.22	J	0.46	J	mg/kg	OFS-256-4	6 / 10	0.21 - 2.8
Off-site Soil Area 256	IRON	23400		36400		mg/kg	OFS-256-8	10 / 10	-
Off-site Soil Area 256	LEAD	12.4		46.8		mg/kg	OFS-256-4	10 / 10	-
Off-site Soil Area 256	MAGNESIUM	7570		10900		mg/kg	OFS-256-8	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 256	MANGANESE	1600		2710		mg/kg	OFS-256-1	10 / 10	-
Off-site Soil Area 256	MERCURY	0.048	J	0.09	J	mg/kg	OFS-256-9	6 / 10	0.1 - 0.11
Off-site Soil Area 256	NICKEL	36.6		51.1		mg/kg	OFS-256-8	10 / 10	-
Off-site Soil Area 256	POTASSIUM	1830		4160		mg/kg	OFS-256-7	10 / 10	-
Off-site Soil Area 256	SELENIUM	2.7	J	3	J	mg/kg	OFS-256-5	6 / 10	3.5 - 4
Off-site Soil Area 256	SILVER	0.58	J	0.81	J	mg/kg	OFS-256-4	4 / 10	0.12 - 1.1
Off-site Soil Area 256	SODIUM	63.7	J	262	J	mg/kg	OFS-256-8	6 / 10	69 - 304
Off-site Soil Area 256	THALLIUM	0.48	J	0.84	J	mg/kg	OFS-256-1	4 / 10	2.5 - 2.6
Off-site Soil Area 256	VANADIUM	44.3		76.7		mg/kg	OFS-256-8	10 / 10	-
Off-site Soil Area 256	ZINC	65.8		331		mg/kg	OFS-256-4	10 / 10	-
Off-site Soil Area 257	ALUMINUM	11600		19400		mg/kg	OFS-257-5	10 / 10	-
Off-site Soil Area 257	ARSENIC	13.9		28.9		mg/kg	OFS-257-3	10 / 10	-
Off-site Soil Area 257	BARIUM	109		162		mg/kg	OFS-257-5	10 / 10	-
Off-site Soil Area 257	BERYLLIUM	0.066	J	0.58		mg/kg	OFS-257-1	7 / 10	0.5 - 0.52
Off-site Soil Area 257	CADMIUM	0.84		1.7		mg/kg	OFS-257-4	10 / 10	-
Off-site Soil Area 257	CALCIUM	4780		7610		mg/kg	OFS-257-5	10 / 10	-
Off-site Soil Area 257	CHROMIUM	15.5		21.5		mg/kg	OFS-257-5	10 / 10	-
Off-site Soil Area 257	COBALT	9.9		15.8		mg/kg	OFS-257-5	10 / 10	-
Off-site Soil Area 257	COPPER	47.9		113		mg/kg	OFS-257-3	10 / 10	-
Off-site Soil Area 257	CYANIDE	0.21	J	0.45	J	mg/kg	OFS-257-1	9 / 10	2.6 - 2.6
Off-site Soil Area 257	IRON	18000		28600		mg/kg	OFS-257-5	10 / 10	-
Off-site Soil Area 257	LEAD	17		69.9		mg/kg	OFS-257-4	10 / 10	-
Off-site Soil Area 257	MAGNESIUM	4330		7450		mg/kg	OFS-257-5	10 / 10	-
Off-site Soil Area 257	MANGANESE	441		800		mg/kg	OFS-257-5	10 / 10	-
Off-site Soil Area 257	MERCURY	0.045	J	0.31		mg/kg	OFS-257-4	9 / 10	0.12 - 0.12
Off-site Soil Area 257	NICKEL	14.3		19.9		mg/kg	OFS-257-1	10 / 10	-
Off-site Soil Area 257	POTASSIUM	1650		4060		mg/kg	OFS-257-8	10 / 10	-
Off-site Soil Area 257	SELENIUM	1.9	J	3.2	J	mg/kg	OFS-257-5	10 / 10	-
Off-site Soil Area 257	SILVER	0.42	J	0.71	J	mg/kg	OFS-257-4	7 / 10	1 - 1.2
Off-site Soil Area 257	SODIUM	43.1	J	110	J	mg/kg	OFS-257-1	10 / 10	-
Off-site Soil Area 257	VANADIUM	30.7		56.6		mg/kg	OFS-257-5	10 / 10	-
Off-site Soil Area 257	ZINC	79.5		332		mg/kg	OFS-257-4	10 / 10	-
Off-site Soil Area 258	ALUMINUM	9860		14800		mg/kg	OFS-258-1	10 / 10	-
Off-site Soil Area 258	ANTIMONY	0.25	J	1.3	J	mg/kg	OFS-258-9	8 / 10	6.2 - 6.4
Off-site Soil Area 258	ARSENIC	18.2		89.9		mg/kg	OFS-258-9	10 / 10	-
Off-site Soil Area 258	BARIUM	131	J	272		mg/kg	OFS-258-1	10 / 10	-
Off-site Soil Area 258	BERYLLIUM	0.098	J	0.44	J	mg/kg	OFS-258-6	10 / 10	-
Off-site Soil Area 258	CADMIUM	0.4	J	4	J	mg/kg	OFS-258-6	10 / 10	-
Off-site Soil Area 258	CALCIUM	4350		13900		mg/kg	OFS-258-5	10 / 10	-
Off-site Soil Area 258	CHROMIUM	19.1		26		mg/kg	OFS-258-6	10 / 10	-
Off-site Soil Area 258	COBALT	9.4		16.1		mg/kg	OFS-258-1	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 258	COPPER	70.5		421		mg/kg	OFS-258-9	10 / 10	-
Off-site Soil Area 258	CYANIDE	0.31	J	11.6		mg/kg	OFS-258-7	10 / 10	-
Off-site Soil Area 258	IRON	18800		29700		mg/kg	OFS-258-9	10 / 10	-
Off-site Soil Area 258	LEAD	24		516		mg/kg	OFS-258-6	10 / 10	-
Off-site Soil Area 258	MAGNESIUM	5100		7910		mg/kg	OFS-258-9	10 / 10	-
Off-site Soil Area 258	MANGANESE	572		1820		mg/kg	OFS-258-1	10 / 10	-
Off-site Soil Area 258	MERCURY	0.084	J	0.65		mg/kg	OFS-258-6	10 / 10	-
Off-site Soil Area 258	NICKEL	18.7		24.8		mg/kg	OFS-258-1	10 / 10	-
Off-site Soil Area 258	POTASSIUM	2520		4280		mg/kg	OFS-258-1	10 / 10	-
Off-site Soil Area 258	SELENIUM	0.45	J	2.7	J	mg/kg	OFS-258-1	8 / 10	3.5 - 3.6
Off-site Soil Area 258	SILVER	0.071	J	2.1		mg/kg	OFS-258-6	10 / 10	-
Off-site Soil Area 258	SODIUM	53.3	J	2010	J	mg/kg	OFS-258-8	10 / 10	-
Off-site Soil Area 258	THALLIUM	0.14	J	0.4	J	mg/kg	OFS-258-9	5 / 10	2.5 - 2.7
Off-site Soil Area 258	VANADIUM	36.7		52.6		mg/kg	OFS-258-9	10 / 10	-
Off-site Soil Area 258	ZINC	117		939		mg/kg	OFS-258-6	10 / 10	-
Off-site Soil Area 259	ALUMINUM	12700		22300		mg/kg	OFS-259-1	10 / 10	-
Off-site Soil Area 259	ANTIMONY	0.21	J	3.8	J	mg/kg	OFS-259-1	9 / 10	6.1 - 6.1
Off-site Soil Area 259	ARSENIC	19		52.4		mg/kg	OFS-259-3	10 / 10	-
Off-site Soil Area 259	BARIUM	152		330		mg/kg	OFS-259-1	10 / 10	-
Off-site Soil Area 259	BERYLLIUM	0.39	J	0.76		mg/kg	OFS-259-3	10 / 10	-
Off-site Soil Area 259	CADMIUM	0.39	J	2.6	J	mg/kg	OFS-259-3	10 / 10	-
Off-site Soil Area 259	CALCIUM	4030	J	9730	J	mg/kg	OFS-259-1	10 / 10	-
Off-site Soil Area 259	CHROMIUM	17.6		37.2		mg/kg	OFS-259-1	10 / 10	-
Off-site Soil Area 259	COBALT	11.4		19.2		mg/kg	OFS-259-3	10 / 10	-
Off-site Soil Area 259	COPPER	60.9	J	482	J	mg/kg	OFS-259-3	10 / 10	-
Off-site Soil Area 259	CYANIDE	0.22	J	0.6	J	mg/kg	OFS-259-3	10 / 10	-
Off-site Soil Area 259	IRON	20400		33700		mg/kg	OFS-259-3	10 / 10	-
Off-site Soil Area 259	LEAD	18.8		119		mg/kg	OFS-259-9	10 / 10	-
Off-site Soil Area 259	MAGNESIUM	4680	J	9200	J	mg/kg	OFS-259-1	10 / 10	-
Off-site Soil Area 259	MANGANESE	602		2190		mg/kg	OFS-259-3	10 / 10	-
Off-site Soil Area 259	MERCURY	0.048	J	0.48		mg/kg	OFS-259-2	10 / 10	0.1 - 0.1
Off-site Soil Area 259	NICKEL	20.4		52.3		mg/kg	OFS-259-5	10 / 10	-
Off-site Soil Area 259	POTASSIUM	1700		4030		mg/kg	OFS-259-7	10 / 10	-
Off-site Soil Area 259	SELENIUM	0.58	J	0.58	J	mg/kg	OFS-259-7	1 / 10	3.5 - 3.8
Off-site Soil Area 259	SILVER	0.038	J	0.8	J	mg/kg	OFS-259-3	9 / 10	1 - 1
Off-site Soil Area 259	SODIUM	39.3	J	118	J	mg/kg	OFS-259-1	10 / 10	-
Off-site Soil Area 259	THALLIUM	0.14	J	0.59	J	mg/kg	OFS-259-3	7 / 10	2.5 - 2.5
Off-site Soil Area 259	VANADIUM	35.6		67.9		mg/kg	OFS-259-1	10 / 10	-
Off-site Soil Area 259	ZINC	102		350		mg/kg	OFS-259-3	10 / 10	-
Off-site Soil Area 260	ALUMINUM	12800		25200		mg/kg	OFS-260-2	10 / 10	-
Off-site Soil Area 260	ANTIMONY	0.4	J	5.4	J	mg/kg	OFS-260-8	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 260	ARSENIC	51.1		348		mg/kg	OFS-260-8	10 / 10	-
Off-site Soil Area 260	BARIUM	233		482		mg/kg	OFS-260-4	10 / 10	-
Off-site Soil Area 260	BERYLLIUM	0.29	J	0.74		mg/kg	OFS-260-2	10 / 10	-
Off-site Soil Area 260	CADMIUM	4.1	J	28.3	J	mg/kg	OFS-260-8	10 / 10	-
Off-site Soil Area 260	CALCIUM	12200	J	24600	J	mg/kg	OFS-260-3	10 / 10	-
Off-site Soil Area 260	CHROMIUM	18.3		43.3		mg/kg	OFS-260-2	10 / 10	-
Off-site Soil Area 260	COBALT	12.3		19		mg/kg	OFS-260-4	10 / 10	-
Off-site Soil Area 260	COPPER	169	J	1940		mg/kg	OFS-260-6	10 / 10	-
Off-site Soil Area 260	CYANIDE	0.2	J	0.27	J	mg/kg	OFS-260-7	5 / 10	2.5 - 2.7
Off-site Soil Area 260	IRON	22000		32700		mg/kg	OFS-260-8	10 / 10	-
Off-site Soil Area 260	LEAD	149		1820		mg/kg	OFS-260-7	10 / 10	-
Off-site Soil Area 260	MAGNESIUM	5760	J	9180	J	mg/kg	OFS-260-4	10 / 10	-
Off-site Soil Area 260	MANGANESE	608		958		mg/kg	OFS-260-4	10 / 10	-
Off-site Soil Area 260	MERCURY	1.8		15.1		mg/kg	OFS-260-6	10 / 10	-
Off-site Soil Area 260	NICKEL	24		50.9		mg/kg	OFS-260-4	10 / 10	-
Off-site Soil Area 260	POTASSIUM	1350		2690		mg/kg	OFS-260-5	10 / 10	-
Off-site Soil Area 260	SELENIUM	1.1	J	7.5		mg/kg	OFS-260-8	9 / 10	3.6 - 3.6
Off-site Soil Area 260	SILVER	0.74	J	9.3		mg/kg	OFS-260-8	10 / 10	-
Off-site Soil Area 260	SODIUM	66.6	J	163	J	mg/kg	OFS-260-8	10 / 10	-
Off-site Soil Area 260	THALLIUM	0.19	J	0.58	J	mg/kg	OFS-260-7	8 / 10	2.5 - 2.6
Off-site Soil Area 260	VANADIUM	34.5		52		mg/kg	OFS-260-2	10 / 10	-
Off-site Soil Area 260	ZINC	1210		4860		mg/kg	OFS-260-8	10 / 10	-
Off-site Soil Area 261	ALUMINUM	15800		25300		mg/kg	OFS-261-1	10 / 10	-
Off-site Soil Area 261	ANTIMONY	0.16	J	0.52	J	mg/kg	OFS-261-9	10 / 10	-
Off-site Soil Area 261	ARSENIC	42.7		70.8		mg/kg	OFS-261-9	10 / 10	-
Off-site Soil Area 261	BARIUM	159	J	258	J	mg/kg	OFS-261-6	10 / 10	-
Off-site Soil Area 261	BERYLLIUM	0.31	J	0.76		mg/kg	OFS-261-1	10 / 10	-
Off-site Soil Area 261	CADMIUM	0.14	J	1.7	J	mg/kg	OFS-261-1	10 / 10	-
Off-site Soil Area 261	CALCIUM	3660		42100		mg/kg	OFS-261-3	10 / 10	-
Off-site Soil Area 261	CHROMIUM	27.7		65.8		mg/kg	OFS-261-5	10 / 10	-
Off-site Soil Area 261	COBALT	15.2		33.1		mg/kg	OFS-261-5	10 / 10	-
Off-site Soil Area 261	COPPER	44.5		121		mg/kg	OFS-261-2	10 / 10	-
Off-site Soil Area 261	CYANIDE	0.22	J	0.37	J	mg/kg	OFS-261-6	6 / 10	2.5 - 2.8
Off-site Soil Area 261	IRON	22500		42800		mg/kg	OFS-261-5	10 / 10	-
Off-site Soil Area 261	LEAD	13.5		164		mg/kg	OFS-261-1	10 / 10	-
Off-site Soil Area 261	MAGNESIUM	7620		13900		mg/kg	OFS-261-5	10 / 10	-
Off-site Soil Area 261	MANGANESE	823		2060		mg/kg	OFS-261-5	10 / 10	-
Off-site Soil Area 261	MERCURY	0.044	J	0.14		mg/kg	OFS-261-1	7 / 10	0.1 - 0.1
Off-site Soil Area 261	NICKEL	37.6		50.9		mg/kg	OFS-261-5	10 / 10	-
Off-site Soil Area 261	POTASSIUM	2440		4740		mg/kg	OFS-261-1	10 / 10	-
Off-site Soil Area 261	SILVER	0.054	J	0.2	J	mg/kg	OFS-261-1	6 / 10	1 - 1.1

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 261	SODIUM	29.5	J	47.1	J	mg/kg	OFS-261-9	10 / 10	-
Off-site Soil Area 261	THALLIUM	0.21	J	1	J	mg/kg	OFS-261-6	10 / 10	-
Off-site Soil Area 261	VANADIUM	60.5		126		mg/kg	OFS-261-5	10 / 10	-
Off-site Soil Area 261	ZINC	59.4		198		mg/kg	OFS-261-8	10 / 10	-
Off-site Soil Area 262	ALUMINUM	11000		17200		mg/kg	OFS-262-8	10 / 10	-
Off-site Soil Area 262	ANTIMONY	0.16	J	0.62	J	mg/kg	OFS-262-1	6 / 10	6.2 - 7.3
Off-site Soil Area 262	ARSENIC	11.6		44.7		mg/kg	OFS-262-1	10 / 10	-
Off-site Soil Area 262	BARIUM	142	J	288		mg/kg	OFS-262-2	10 / 10	-
Off-site Soil Area 262	BERYLLIUM	0.31	J	0.61		mg/kg	OFS-262-8	10 / 10	-
Off-site Soil Area 262	CADMIUM	0.7	J	1.8	J	mg/kg	OFS-262-2	4 / 10	0.042 - 0.46
Off-site Soil Area 262	CALCIUM	4280		6790		mg/kg	OFS-262-4	10 / 10	-
Off-site Soil Area 262	CHROMIUM	16.7		34.6		mg/kg	OFS-262-2	10 / 10	-
Off-site Soil Area 262	COBALT	10.4		13.5		mg/kg	OFS-262-1	10 / 10	-
Off-site Soil Area 262	COPPER	31		929		mg/kg	OFS-262-1	10 / 10	-
Off-site Soil Area 262	CYANIDE	0.28	J	0.64	J	mg/kg	OFS-262-1	2 / 10	2.5 - 3
Off-site Soil Area 262	IRON	19300		26300		mg/kg	OFS-262-1	10 / 10	-
Off-site Soil Area 262	LEAD	15.1		305		mg/kg	OFS-262-1	10 / 10	-
Off-site Soil Area 262	MAGNESIUM	4640		6890		mg/kg	OFS-262-5	10 / 10	-
Off-site Soil Area 262	MANGANESE	458		753		mg/kg	OFS-262-8	10 / 10	-
Off-site Soil Area 262	MERCURY	0.045	J	0.33		mg/kg	OFS-262-1	7 / 10	0.1 - 0.12
Off-site Soil Area 262	NICKEL	16.4		25.3		mg/kg	OFS-262-7	10 / 10	-
Off-site Soil Area 262	POTASSIUM	1670		3680		mg/kg	OFS-262-4	10 / 10	-
Off-site Soil Area 262	SELENIUM	0.39	J	0.39	J	mg/kg	OFS-262-2	1 / 10	3.5 - 4.3
Off-site Soil Area 262	SILVER	0.74	J	0.74	J	mg/kg	OFS-262-1	1 / 10	0.051 - 1.2
Off-site Soil Area 262	SODIUM	243	J	243	J	mg/kg	OFS-262-1	1 / 10	42.7 - 367
Off-site Soil Area 262	THALLIUM	0.14	J	0.31	J	mg/kg	OFS-262-1	6 / 10	2.5 - 3
Off-site Soil Area 262	VANADIUM	31		42.7		mg/kg	OFS-262-1	10 / 10	-
Off-site Soil Area 262	ZINC	65		672		mg/kg	OFS-262-1	10 / 10	-
Off-site Soil Area 263	ALUMINUM	14400		20900		mg/kg	OFS-263-6	10 / 10	-
Off-site Soil Area 263	ANTIMONY	0.23	J	0.24	J	mg/kg	OFS-263-1	2 / 10	6 - 6.7
Off-site Soil Area 263	ARSENIC	14.8		30.7		mg/kg	OFS-263-6	10 / 10	-
Off-site Soil Area 263	BARIUM	214	J-	394		mg/kg	OFS-263-8	10 / 10	-
Off-site Soil Area 263	BERYLLIUM	0.56		0.74		mg/kg	OFS-263-6	9 / 10	0.24 - 0.24
Off-site Soil Area 263	CADMIUM	0.6	J	1.1	J	mg/kg	OFS-263-9	3 / 10	0.086 - 0.35
Off-site Soil Area 263	CALCIUM	8280		19000		mg/kg	OFS-263-3	10 / 10	-
Off-site Soil Area 263	CHROMIUM	18.9		27.6		mg/kg	OFS-263-8	10 / 10	-
Off-site Soil Area 263	COBALT	11.1		22.7		mg/kg	OFS-263-4	10 / 10	-
Off-site Soil Area 263	COPPER	35.2		105		mg/kg	OFS-263-1	10 / 10	-
Off-site Soil Area 263	CYANIDE	0.46	J	0.46	J	mg/kg	OFS-263-3	1 / 10	0.21 - 2.8
Off-site Soil Area 263	IRON	20500		25000		mg/kg	OFS-263-2	10 / 10	-
Off-site Soil Area 263	LEAD	15.5		75.1		mg/kg	OFS-263-1	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 263	MAGNESIUM	5850		8340		mg/kg	OFS-263-2	10 / 10	-
Off-site Soil Area 263	MANGANESE	585		975		mg/kg	OFS-263-4	10 / 10	-
Off-site Soil Area 263	MERCURY	0.053	J	0.24		mg/kg	OFS-263-1	6 / 10	0.1 - 0.1
Off-site Soil Area 263	NICKEL	25.4		42.9		mg/kg	OFS-263-8	10 / 10	-
Off-site Soil Area 263	POTASSIUM	1810		3900		mg/kg	OFS-263-6	10 / 10	-
Off-site Soil Area 263	SELENIUM	2	J	2	J	mg/kg	OFS-263-9	1 / 10	3.6 - 3.9
Off-site Soil Area 263	SODIUM	134	J	134	J	mg/kg	OFS-263-9	1 / 10	70.7 - 418
Off-site Soil Area 263	THALLIUM	0.17	J	0.19	J	mg/kg	OFS-263-5	2 / 10	2.5 - 2.6
Off-site Soil Area 263	VANADIUM	37.8		49.3		mg/kg	OFS-263-4	10 / 10	-
Off-site Soil Area 263	ZINC	81.3		155		mg/kg	OFS-263-1	10 / 10	-
Off-site Soil Area 264	ALUMINUM	17600		28800		mg/kg	OFS-264-5	10 / 10	-
Off-site Soil Area 264	ANTIMONY	0.47	J	2.4	J	mg/kg	OFS-264-8	4 / 10	6 - 6.5
Off-site Soil Area 264	ARSENIC	48.5		741		mg/kg	OFS-264-8	10 / 10	-
Off-site Soil Area 264	BARIUM	75.7	J-	165	J-	mg/kg	OFS-264-2	10 / 10	-
Off-site Soil Area 264	CADMIUM	1.4	J	7.5	J	mg/kg	OFS-264-8	10 / 10	-
Off-site Soil Area 264	CALCIUM	10100		39800		mg/kg	OFS-264-9	10 / 10	-
Off-site Soil Area 264	CHROMIUM	15.7		140		mg/kg	OFS-264-5	10 / 10	-
Off-site Soil Area 264	COBALT	17.1		59.3		mg/kg	OFS-264-5	10 / 10	-
Off-site Soil Area 264	COPPER	45		144		mg/kg	OFS-264-5	10 / 10	-
Off-site Soil Area 264	CYANIDE	0.22	J	0.26	J	mg/kg	OFS-264-8	2 / 10	2.5 - 2.7
Off-site Soil Area 264	IRON	15800		44900		mg/kg	OFS-264-5	10 / 10	-
Off-site Soil Area 264	LEAD	33.5		419		mg/kg	OFS-264-8	10 / 10	-
Off-site Soil Area 264	MAGNESIUM	8630		22300		mg/kg	OFS-264-5	10 / 10	-
Off-site Soil Area 264	MANGANESE	812		1350		mg/kg	OFS-264-5	10 / 10	-
Off-site Soil Area 264	MERCURY	0.13	J-	2.2	J-	mg/kg	OFS-264-8	10 / 10	-
Off-site Soil Area 264	NICKEL	16.7		115		mg/kg	OFS-264-5	10 / 10	-
Off-site Soil Area 264	POTASSIUM	1100		2400		mg/kg	OFS-264-1	10 / 10	-
Off-site Soil Area 264	SELENIUM	2.7	J	7.3		mg/kg	OFS-264-8	10 / 10	-
Off-site Soil Area 264	SODIUM	51.8	J	101	J	mg/kg	OFS-264-8	10 / 10	-
Off-site Soil Area 264	VANADIUM	53.4		127		mg/kg	OFS-264-5	10 / 10	-
Off-site Soil Area 264	ZINC	152		1880		mg/kg	OFS-264-8	10 / 10	-
Off-site Soil Area 265	ALUMINUM	14200		23100		mg/kg	OFS-265-9	10 / 10	-
Off-site Soil Area 265	ANTIMONY	0.28	J	0.7	J	mg/kg	OFS-265-7	3 / 10	6 - 6.4
Off-site Soil Area 265	ARSENIC	19.1		66.4		mg/kg	OFS-265-4	10 / 10	-
Off-site Soil Area 265	BARIUM	134	J-	1240		mg/kg	OFS-265-8	10 / 10	-
Off-site Soil Area 265	BERYLLIUM	0.55		0.65		mg/kg	OFS-265-7	3 / 10	0.18 - 0.41
Off-site Soil Area 265	CADMIUM	1.2	J	3.1	J	mg/kg	OFS-265-4	9 / 10	0.4 - 0.4
Off-site Soil Area 265	CALCIUM	8130		59800		mg/kg	OFS-265-8	10 / 10	-
Off-site Soil Area 265	CHROMIUM	24.6		44.7		mg/kg	OFS-265-8	10 / 10	-
Off-site Soil Area 265	COBALT	13.6		21.1		mg/kg	OFS-265-9	10 / 10	-
Off-site Soil Area 265	COPPER	80.2		368		mg/kg	OFS-265-7	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 265	CYANIDE	0.22	J	0.59	J	mg/kg	OFS-265-7	9 / 10	2.6 - 2.6
Off-site Soil Area 265	IRON	20900		34700		mg/kg	OFS-265-9	10 / 10	-
Off-site Soil Area 265	LEAD	27.5		196		mg/kg	OFS-265-8	10 / 10	-
Off-site Soil Area 265	MAGNESIUM	7330		11600		mg/kg	OFS-265-9	10 / 10	-
Off-site Soil Area 265	MANGANESE	914		1720		mg/kg	OFS-265-5	10 / 10	-
Off-site Soil Area 265	MERCURY	0.061	J	0.33		mg/kg	OFS-265-7	10 / 10	-
Off-site Soil Area 265	NICKEL	29.9		49.5		mg/kg	OFS-265-9	10 / 10	-
Off-site Soil Area 265	POTASSIUM	2970		5150		mg/kg	OFS-265-6	10 / 10	-
Off-site Soil Area 265	SELENIUM	1.8	J	3	J	mg/kg	OFS-265-4	7 / 10	3.5 - 3.6
Off-site Soil Area 265	SODIUM	56.1	J	546	J	mg/kg	OFS-265-2	7 / 10	56.8 - 189
Off-site Soil Area 265	THALLIUM	0.18	J	0.48	J	mg/kg	OFS-265-7	3 / 10	2.5 - 2.7
Off-site Soil Area 265	VANADIUM	38.1		71.8		mg/kg	OFS-265-9	10 / 10	-
Off-site Soil Area 265	ZINC	143		1060		mg/kg	OFS-265-4	10 / 10	-
Off-site Soil Area 266	ALUMINUM	13400		16600		mg/kg	OFS-266-2	10 / 10	-
Off-site Soil Area 266	ARSENIC	11.3		14.9		mg/kg	OFS-266-9	10 / 10	-
Off-site Soil Area 266	BARIUM	126		203		mg/kg	OFS-266-2	10 / 10	-
Off-site Soil Area 266	CALCIUM	10400		21500		mg/kg	OFS-266-1	10 / 10	-
Off-site Soil Area 266	CHROMIUM	17.2		25.7		mg/kg	OFS-266-4	10 / 10	-
Off-site Soil Area 266	COBALT	10.6		14.9		mg/kg	OFS-266-1	10 / 10	-
Off-site Soil Area 266	COPPER	21.6		27.1		mg/kg	OFS-266-9	10 / 10	-
Off-site Soil Area 266	IRON	21000		22900		mg/kg	OFS-266-6	10 / 10	-
Off-site Soil Area 266	LEAD	8.6		18.4		mg/kg	OFS-266-6	10 / 10	-
Off-site Soil Area 266	MAGNESIUM	6220		7570		mg/kg	OFS-266-2	10 / 10	-
Off-site Soil Area 266	MANGANESE	499		633		mg/kg	OFS-266-3	10 / 10	-
Off-site Soil Area 266	MERCURY	0.045	J	0.059	J	mg/kg	OFS-266-9	5 / 10	0.1 - 0.11
Off-site Soil Area 266	NICKEL	18.6		20.7		mg/kg	OFS-266-2	10 / 10	-
Off-site Soil Area 266	POTASSIUM	1590		2170		mg/kg	OFS-266-1	10 / 10	-
Off-site Soil Area 266	VANADIUM	36.8		42.4		mg/kg	OFS-266-9	10 / 10	-
Off-site Soil Area 266	ZINC	53.8	J	103	J	mg/kg	OFS-266-1	10 / 10	-
Off-site Soil Area 267	ALUMINUM	10900		14700		mg/kg	OFS-267-6	10 / 10	-
Off-site Soil Area 267	ANTIMONY	0.22	J	2.1	J	mg/kg	OFS-267-9	9 / 10	6 - 6
Off-site Soil Area 267	ARSENIC	25.5		128		mg/kg	OFS-267-9	10 / 10	-
Off-site Soil Area 267	BARIUM	116		338		mg/kg	OFS-267-6	10 / 10	-
Off-site Soil Area 267	BERYLLIUM	0.34	J	0.61	J	mg/kg	OFS-267-6	10 / 10	-
Off-site Soil Area 267	CADMIUM	1.4		3.9		mg/kg	OFS-267-8	9 / 10	0.97 - 0.97
Off-site Soil Area 267	CALCIUM	4610		7400		mg/kg	OFS-267-9	10 / 10	-
Off-site Soil Area 267	CHROMIUM	11.3		24.7		mg/kg	OFS-267-2	10 / 10	-
Off-site Soil Area 267	COBALT	8.6	J	13.2		mg/kg	OFS-267-7	10 / 10	-
Off-site Soil Area 267	COPPER	32.2		303		mg/kg	OFS-267-5	10 / 10	-
Off-site Soil Area 267	CYANIDE	0.12	J	0.24	J	mg/kg	OFS-267-5	3 / 10	0.11 - 2.5
Off-site Soil Area 267	IRON	22500		37400		mg/kg	OFS-267-9	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Off-site Soil Area 267	LEAD	24.3		285		mg/kg	OFS-267-6	10 / 10	-
Off-site Soil Area 267	MAGNESIUM	4780		9940		mg/kg	OFS-267-9	10 / 10	-
Off-site Soil Area 267	MANGANESE	450		871		mg/kg	OFS-267-7	10 / 10	-
Off-site Soil Area 267	MERCURY	0.11		0.87		mg/kg	OFS-267-4	10 / 10	-
Off-site Soil Area 267	NICKEL	4	J	5.6	J	mg/kg	OFS-267-2	3 / 10	3.8 - 5.7
Off-site Soil Area 267	POTASSIUM	1660		3800		mg/kg	OFS-267-1	10 / 10	-
Off-site Soil Area 267	SODIUM	38.6	J	104	J	mg/kg	OFS-267-8	10 / 10	-
Off-site Soil Area 267	VANADIUM	38.3		68.1		mg/kg	OFS-267-2	10 / 10	-
Off-site Soil Area 267	ZINC	100	J	890	J	mg/kg	OFS-267-8	10 / 10	-
Off-site Soil Area 268	ALUMINUM	12200		28300		mg/kg	OFS-268-5	10 / 10	-
Off-site Soil Area 268	ANTIMONY	0.21	J	3.1	J	mg/kg	OFS-268-6	9 / 10	6.1 - 6.1
Off-site Soil Area 268	ARSENIC	31.1		124		mg/kg	OFS-268-8	10 / 10	-
Off-site Soil Area 268	BARIUM	143		608		mg/kg	OFS-268-4	10 / 10	-
Off-site Soil Area 268	BERYLLIUM	0.53	J	1.3		mg/kg	OFS-268-4	6 / 10	0.74 - 1
Off-site Soil Area 268	CADMIUM	1.1		4.6		mg/kg	OFS-268-8	10 / 10	-
Off-site Soil Area 268	CALCIUM	2030		20200		mg/kg	OFS-268-5	10 / 10	-
Off-site Soil Area 268	CHROMIUM	27.9		56.7		mg/kg	OFS-268-3	10 / 10	-
Off-site Soil Area 268	COBALT	13.1		25.2		mg/kg	OFS-268-7	10 / 10	-
Off-site Soil Area 268	COPPER	85.5		682		mg/kg	OFS-268-8	10 / 10	-
Off-site Soil Area 268	IRON	30300		55500		mg/kg	OFS-268-7	10 / 10	-
Off-site Soil Area 268	LEAD	21.4		234		mg/kg	OFS-268-8	10 / 10	-
Off-site Soil Area 268	MAGNESIUM	4340		8940		mg/kg	OFS-268-5	10 / 10	-
Off-site Soil Area 268	MANGANESE	803		2760		mg/kg	OFS-268-4	10 / 10	-
Off-site Soil Area 268	MERCURY	0.04	J	0.34		mg/kg	OFS-268-6	10 / 10	-
Off-site Soil Area 268	NICKEL	7.3	J	51.6	J	mg/kg	OFS-268-5	10 / 10	-
Off-site Soil Area 268	POTASSIUM	2350		4080		mg/kg	OFS-268-3	10 / 10	-
Off-site Soil Area 268	SODIUM	33.8	J	325	J	mg/kg	OFS-268-8	10 / 10	-
Off-site Soil Area 268	VANADIUM	61.6		107		mg/kg	OFS-268-7	10 / 10	-
Off-site Soil Area 268	ZINC	80.2		339		mg/kg	OFS-268-8	10 / 10	-
Toxicity Characteristic Leaching Procedure	ALUMINUM	579		181000		mg/kg	TCLP-3	10 / 10	-
Toxicity Characteristic Leaching Procedure	ANTIMONY	1.1	J	125		mg/kg	TCLP-1	10 / 10	-
Toxicity Characteristic Leaching Procedure	ARSENIC	18.7	J	3620	J	mg/kg	TCLP-2	10 / 10	-
Toxicity Characteristic Leaching Procedure	BARIUM	5.6	J	194		mg/kg	TCLP-3	9 / 10	23 - 23
Toxicity Characteristic Leaching Procedure	BERYLLIUM	0.062	J	12.8		mg/kg	TCLP-3	8 / 10	0.61 - 0.63
Toxicity Characteristic Leaching Procedure	CADMIUM	0.18	J	18.1	J	mg/kg	TCLP-3	10 / 10	-
Toxicity Characteristic Leaching Procedure	CALCIUM	933		34400		mg/kg	TCLP-12	10 / 10	-
Toxicity Characteristic Leaching Procedure	CHROMIUM	0.67	J	763		mg/kg	TCLP-3	10 / 10	-
Toxicity Characteristic Leaching Procedure	COBALT	2	J	22.3		mg/kg	TCLP-3	8 / 10	6.1 - 6.3
Toxicity Characteristic Leaching Procedure	COPPER	83.9		7060		mg/kg	TCLP-3	10 / 10	-
Toxicity Characteristic Leaching Procedure	CYANIDE	0.21	J	7.4	J	mg/kg	TCLP-11	4 / 10	2.5 - 3.2
Toxicity Characteristic Leaching Procedure	IRON	7190		115000		mg/kg	TCLP-2	10 / 10	-

Table A-3: Surface Soil and Sediment (0 to 2 Feet Below Ground Surface) Data Summary

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Toxicity Characteristic Leaching Procedure	LEAD	41.7		10100		mg/kg	TCLP-11	10 / 10	-
Toxicity Characteristic Leaching Procedure	MAGNESIUM	183	J	18400		mg/kg	TCLP-3	9 / 10	309 - 309
Toxicity Characteristic Leaching Procedure	MANGANESE	10.2		1120		mg/kg	TCLP-3	10 / 10	-
Toxicity Characteristic Leaching Procedure	MERCURY	0.097	J	38.3		mg/kg	TCLP-1	9 / 10	0.11 - 0.11
Toxicity Characteristic Leaching Procedure	NICKEL	0.47	J	546		mg/kg	TCLP-3	8 / 10	4.9 - 5
Toxicity Characteristic Leaching Procedure	POTASSIUM	117	J+	3740	J+	mg/kg	TCLP-3	10 / 10	-
Toxicity Characteristic Leaching Procedure	SELENIUM	0.8	J	52.9	J	mg/kg	TCLP-1	9 / 10	3.4 - 3.4
Toxicity Characteristic Leaching Procedure	SILVER	0.073	J	70.5		mg/kg	TCLP-1	9 / 10	1.2 - 1.2
Toxicity Characteristic Leaching Procedure	SODIUM	87.6	J	3200		mg/kg	TCLP-3	10 / 10	-
Toxicity Characteristic Leaching Procedure	Sulfate	120		120000		mg/kg	TCLP-2	9 / 10	-
Toxicity Characteristic Leaching Procedure	THALLIUM	1.3	J	3.7		mg/kg	TCLP-11	4 / 10	2.4 - 3.1
Toxicity Characteristic Leaching Procedure	VANADIUM	1.4	J	60.1		mg/kg	TCLP-3	10 / 10	-
Toxicity Characteristic Leaching Procedure	ZINC	54		4860		mg/kg	TCLP-3	10 / 10	-

Notes:

J = The analyte was positively identified, but the associated numerical value is estimated.

J- = The analyte was positively identified, but the associated numerical value is estimated with a potential low bias.

J+ = The analyte was positively identified, but the associated numerical value is estimated with a potential high bias.

mg/kg = Milligram(s) per kilogram.

Table A-4: Ground Water and Surface Water Data Analysis Summary (Total - Unfiltered)

Sample Group	Point ID	Sample ID	Total or Dissolved	Duplicate Sample	Sample Date	Metals	Anions-Cations-TDS	Nitrate-Nitrite-Sulfate
Ground Water	GW-999902	GW-999902	T		11-May-10	X	X	X
Ground Water	GW-999903	GW-999903	T		06-May-10	X	X	X
Ground Water	GW-999904	GW-999904	T		06-May-10	X	X	X
Ground Water	GW-999907	GW-999907	T		11-May-10	X	X	X
Ground Water	GW-999909	GW-999909	T		06-May-10	X	X	X
Ground Water	GW-999912	GW-999912	T		08-May-10	X	X	X
Ground Water	GW-999913	GW-999913	T		13-May-10	X	X	X
Ground Water	GW-999914	GW-999914	T		13-May-10	X	X	X
Ground Water	GW-999924	GW-999924	T		06-May-10	X	X	X
Ground Water	GW-999927	GW-999927	T		10-May-10	X	X	X
Ground Water	GW-999930	GW-999930	T		06-May-10	X	X	X
Ground Water	GW-999931	GW-999931	T		11-May-10	X	X	X
Ground Water	GW-999945	GW-999945	T		08-May-10	X	X	X
Ground Water	GW-999947	GW-999947	T		06-May-10	X	X	X
Ground Water	GW-999948	GW-999948	T		04-May-10	X	X	X
Ground Water	GW-999951	GW-999951	T		10-May-10	X	X	X
Ground Water	GW-999952	GW-999952	T		10-May-10	X	X	X
Ground Water	GW-999954	GW-999954	T		03-May-10	X	X	X
Ground Water	GW-999955	GW-999955	T		11-May-10	X	X	X
Ground Water	GW-999956	GW-999956	T		10-May-10	X	X	X
Ground Water	GW-999957	GW-999957	T		07-May-10	X	X	X
Ground Water	GW-999958	GW-999958	T		07-May-10	X	X	X
Ground Water	GW-999959	GW-999959	T		08-May-10	X	X	X
Ground Water	GW-999960	GW-999960	T		07-May-10	X	X	X
Ground Water	GW-999961	GW-999961	T		08-May-10	X	X	X
Ground Water	GW-999962	GW-999962	T		10-May-10	X	X	X
Ground Water	GW-999963	GW-999963	T		12-May-10	X	X	X
Ground Water	GW-999964	GW-999964	T		12-May-10	X	X	X
Ground Water	GW-999965	GW-999965	T		13-May-10	X	X	X
Ground Water	GW-999966	GW-999966	T		13-May-10	X	X	X
Ground Water	GW-9999904	GW-9999904	T	DUP	06-May-10	X	X	X
Ground Water	GW-9999956	GW-9999956	T	DUP	10-May-10	X	X	X
Ground Water	GW-9999958	GW-9999958	T	DUP	07-May-10	X	X	X
Ground Water	GW-9999959	GW-9999959	T	DUP	08-May-10	X	X	X
Ground Water	GW-9999962	GW-9999962	T	DUP	10-May-10	X	X	X
Ground Water	GW-9999963	GW-9999963	T	DUP	12-May-10	X	X	X
Ground Water	MW-01-S	MW-01-S	T		04-May-10	X	X	X
Ground Water	MW-02-S	MW-02-S	T		03-May-10	X	X	X

Table A-4: Ground Water and Surface Water Data Analysis Summary (Total - Unfiltered)

Sample Group	Point ID	Sample ID	Total or Dissolved	Duplicate Sample	Sample Date	Metals	Anions-Cations-TDS	Nitrate-Nitrite-Sulfate
Ground Water	MW-03-S	MW-03-S	T		03-May-10	X	X	X
Ground Water	MW-04-S	MW-04-S	T		05-May-10	X	X	X
Ground Water	MW-05-S	MW-05-S	T		04-May-10	X	X	X
Ground Water	MW-06-D	MW-06-D	T		05-May-10	X	X	X
Ground Water	MW-11-S	MW-11-S	T	DUP	04-May-10	X	X	X
Ground Water	SW-08	SW-08	T		06-May-10	X	X	X

Notes:
DUP = Duplicate sample
TDS = Total dissolved solids
T = Total (Unfiltered)

Table A-5: Ground Water and Surface Water Data Summary (Total - Unfiltered)

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Ground Water	Aluminum	58.2	J	915.00		µg/L	MW-01-S	4 / 37	20.3 - 200
Ground Water	Antimony	6.2	J	6.2	J	µg/L	GW-999954	1 / 37	1.6 - 60
Ground Water	Arsenic	2.3	J	1220		µg/L	GW-999954	25 / 37	2.1 - 10
Ground Water	Barium	6.4	J	248.0		µg/L	GW-9999963	20 / 37	1.3 - 200
Ground Water	Beryllium	0.22	J	0.22	J	µg/L	GW-999965	1 / 37	0.16 - 5
Ground Water	Bromide	90	J	19000		µg/L	MW-11-S	37 / 37	-
Ground Water	Cadmium	5.4		12.20		µg/L	GW-999954	2 / 37	0.068 - 5
Ground Water	Calcium	17100		1140000		µg/L	MW-11-S	37 / 37	-
Ground Water	Chloride	6700		4300000.0		µg/L	MW-11-S	37 / 37	-
Ground Water	Chromium	0.34	J	4.0	J	µg/L	MW-02-S	2 / 37	0.3 - 10
Ground Water	Cobalt	2.6	J	130		µg/L	GW-999954	8 / 37	0.45 - 50
Ground Water	Copper	5.2	J	117		µg/L	SW-08	14 / 37	1.5 - 25
Ground Water	Cyanide	2.4	J	4	J	µg/L	GW-999947	2 / 37	2.5 - 10
Ground Water	Fluoride	90	J	2300		µg/L	GW-999948	36 / 37	-
Ground Water	Iron	7.1	J	37100		µg/L	GW-999954	15 / 37	17.2 - 100
Ground Water	Lead	1.3	J	55		µg/L	GW-999954	11 / 37	10 - 10
Ground Water	Magnesium	8210		1000000.0		µg/L	GW-999954	37 / 37	-
Ground Water	Manganese	1.7	J	5870		µg/L	GW-999954	14 / 37	0.52 - 15
Ground Water	Mercury	0.021	J	0		µg/L	MW-11-S	3 / 37	0.2 - 0.2
Ground Water	Nickel	2	J	46		µg/L	GW-999954	5 / 37	1.1 - 40
Ground Water	Nitrogen, Total Kjeldahl	60	J	63000		µg/L	MW-11-S	5 / 20	-
Ground Water	Potassium	296	J	622000.00		µg/L	MW-11-S	37 / 37	-
Ground Water	Selenium	2.3	J	341		µg/L	MW-01-S	14 / 37	1.4 - 35
Ground Water	Silver	9.2	J	9	J	µg/L	MW-11-S	1 / 37	0.41 - 10
Ground Water	Sodium	20000		1760000		µg/L	MW-11-S	37 / 37	-
Ground Water	Sulfate	17000		4500000		µg/L	GW-999954	37 / 37	-
Ground Water	Thallium	1.5	J	2.1	J	µg/L	GW-999902	3 / 37	1.2 - 25
Ground Water	Total Dissolved Solids	280000		28000000		µg/L	GW-999959	37 / 37	-
Ground Water	Vanadium	1.7	J	23	J	µg/L	GW-999948	28 / 37	1.2 - 50
Ground Water	Zinc	1.8	J	14600.00		µg/L	GW-999954	31 / 37	2.6 - 29.3

Notes:

J = The analyte was positively identified, but the associated numerical value is estimated.

J- = The analyte was positively identified, but the associated numerical value is estimated with a potential low bias.

µg/L = Microgram(s) per liter.

Table A-6: Ground Water and Surface Water Data Analysis Summary (Dissolved - Filtered)

Sample Group	Point ID	Sample ID	Total or Dissolved	Duplicate Sample	Sample Date	Metals
Ground Water	GW-999948	GW-999948-F	D		04-May-10	X
Ground Water	MW-01-S	MW-01-S-F	D		04-May-10	X
Ground Water	MW-02-S	MW-02-S-F	D		03-May-10	X
Ground Water	MW-03-S	MW-03-S-F	D		03-May-10	X
Ground Water	MW-04-S	MW-04-S-F	D		05-May-10	X
Ground Water	MW-05-S	MW-05-S-F	D		04-May-10	X
Ground Water	MW-06-D	MW-06-D-F	D		05-May-10	X
Ground Water	MW-11-S	MW-11-S-F	D	DUP	04-May-10	X

Notes:
DUP = Duplicate sample
D = Dissolved (Filtered)

Table A-7: Ground Water and Surface Water Data Summary (Dissolved - Filtered)

Sample Group	Chemical	Minimum Concentration	Minimum Concentration Qualifier	Maximum Concentration	Maximum Concentration Qualifer	Units	Location of Maximum Concentration	Detection Frequency	Range of Detection Limits
Ground Water	Aluminum	73	J	101	J	µg/L	MW-01-S	1 / 7	200 - 200
Ground Water	Arsenic	2.7	J	362		µg/L	GW-999948	4 / 7	10 - 10
Ground Water	Barium	17.7	J	122	J	µg/L	MW-11-S	7 / 7	-
Ground Water	Cadmium	4.4	J	5	J	µg/L	MW-11-S	1 / 7	5 - 5
Ground Water	Calcium	13900		953000		µg/L	MW-11-S	7 / 7	-
Ground Water	Chromium	4.2	J	4	J	µg/L	MW-02-S	1 / 7	10 - 10
Ground Water	Cobalt	1.3	J	10	J	µg/L	MW-03-S	6 / 7	50 - 50
Ground Water	Copper	16	J	17	J	µg/L	MW-11-S	1 / 7	25 - 25
Ground Water	Iron	27	J	36	J	µg/L	MW-11-S	1 / 7	100 - 100
Ground Water	Magnesium	7110		390000		µg/L	MW-11-S	7 / 7	-
Ground Water	Manganese	1.9	J	786		µg/L	MW-11-S	5 / 7	15 - 15
Ground Water	Mercury	0.1	J	0	J	µg/L	MW-04-S	2 / 7	0.2 - 0.2
Ground Water	Nickel	1.9	J	30	J	µg/L	MW-11-S	2 / 7	40 - 40
Ground Water	Potassium	525	J	578000		µg/L	MW-11-S	7 / 7	-
Ground Water	Selenium	17.7	J	306		µg/L	MW-11-S	3 / 7	35 - 35
Ground Water	Silver	3.1	J	4	J	µg/L	MW-11-S	1 / 7	10 - 10
Ground Water	Sodium	24100		1620000		µg/L	MW-11-S	7 / 7	-
Ground Water	Vanadium	1.4	J	21	J	µg/L	GW-999948	7 / 7	-
Ground Water	Zinc	4.5	J	29	J	µg/L	MW-06-D	6 / 7	60 - 60

Notes:

J = The analyte was positively identified, but the associated numerical value is estimated.

J- = The analyte was positively identified, but the associated numerical value is estimated with a potential low bias.

µg/L = Microgram(s) per liter.

Table A-8: Soil and TCLP Data Evaluation

Sample Group	Sample Date	Start Depth (Feet)	End Depth (Feet)	Site ID	Sample ID	Analyte	TCLP Concentration	TCLP Qualifier	TCLP Units	Metals Concentration	Metals Qualifier	Metals Units
Toxicity Characteristic Leaching Procedure	03-May-10	0	0.5	TCLP-1	TCLP-1-0-0_5	Arsenic		U	µg/L	1820	J	mg/kg
Toxicity Characteristic Leaching Procedure	03-May-10	0	0.5	TCLP-1	TCLP-1-0-0_5	Barium		U	µg/L	28.5		mg/kg
Toxicity Characteristic Leaching Procedure	03-May-10	0	0.5	TCLP-1	TCLP-1-0-0_5	Cadmium		U	µg/L	3.6	J	mg/kg
Toxicity Characteristic Leaching Procedure	03-May-10	0	0.5	TCLP-1	TCLP-1-0-0_5	Chromium		U	µg/L	1.7		mg/kg
Toxicity Characteristic Leaching Procedure	03-May-10	0	0.5	TCLP-1	TCLP-1-0-0_5	Lead		U	µg/L	9990		mg/kg
Toxicity Characteristic Leaching Procedure	03-May-10	0	0.5	TCLP-1	TCLP-1-0-0_5	Mercury	0.7		µg/L	38.3		mg/kg
Toxicity Characteristic Leaching Procedure	03-May-10	0	0.5	TCLP-1	TCLP-1-0-0_5	Selenium		U	µg/L	52.9	J	mg/kg
Toxicity Characteristic Leaching Procedure	03-May-10	0	0.5	TCLP-1	TCLP-1-0-0_5	Silver		U	µg/L	70.5		mg/kg
Toxicity Characteristic Leaching Procedure	03-May-10	0	0.5	TCLP-11	TCLP-11-0-0_5	Arsenic		U	µg/L	1310	J	mg/kg
Toxicity Characteristic Leaching Procedure	03-May-10	0	0.5	TCLP-11	TCLP-11-0-0_5	Barium		U	µg/L		UJ	mg/kg
Toxicity Characteristic Leaching Procedure	03-May-10	0	0.5	TCLP-11	TCLP-11-0-0_5	Cadmium		U	µg/L	4.4	J	mg/kg
Toxicity Characteristic Leaching Procedure	03-May-10	0	0.5	TCLP-11	TCLP-11-0-0_5	Chromium		U	µg/L	1.6		mg/kg
Toxicity Characteristic Leaching Procedure	03-May-10	0	0.5	TCLP-11	TCLP-11-0-0_5	Lead		U	µg/L	10100		mg/kg
Toxicity Characteristic Leaching Procedure	03-May-10	0	0.5	TCLP-11	TCLP-11-0-0_5	Mercury	0.2	J	µg/L	29.6		mg/kg
Toxicity Characteristic Leaching Procedure	03-May-10	0	0.5	TCLP-11	TCLP-11-0-0_5	Selenium		U	µg/L	22.3	J	mg/kg
Toxicity Characteristic Leaching Procedure	03-May-10	0	0.5	TCLP-11	TCLP-11-0-0_5	Silver		U	µg/L	67.1		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-12	TCLP-12-0-0_5	Arsenic	6100		µg/L	3210	J	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-12	TCLP-12-0-0_5	Barium		U	µg/L	69.5		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-12	TCLP-12-0-0_5	Cadmium	350		µg/L	10.4	J	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-12	TCLP-12-0-0_5	Chromium	76	J	µg/L	26.1		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-12	TCLP-12-0-0_5	Lead		U	µg/L	2810		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-12	TCLP-12-0-0_5	Mercury	0.92		µg/L	8.7		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-12	TCLP-12-0-0_5	Selenium		U	µg/L	20.9		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-12	TCLP-12-0-0_5	Silver		U	µg/L	11.2		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-2	TCLP-2-0-0_5	Arsenic	7200		µg/L	3620	J	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-2	TCLP-2-0-0_5	Barium		U	µg/L	67		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-2	TCLP-2-0-0_5	Cadmium	370		µg/L	11.5	J	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-2	TCLP-2-0-0_5	Chromium	86	J	µg/L	27		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-2	TCLP-2-0-0_5	Lead		U	µg/L	2670		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-2	TCLP-2-0-0_5	Mercury	0.73		µg/L	6.9		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-2	TCLP-2-0-0_5	Selenium		U	µg/L	25.8		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-2	TCLP-2-0-0_5	Silver		U	µg/L	10.6		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-3	TCLP-3-0-0_5	Arsenic		U	µg/L	28.1	J	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-3	TCLP-3-0-0_5	Barium	860		µg/L	194		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-3	TCLP-3-0-0_5	Cadmium	54		µg/L	18.1	J	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-3	TCLP-3-0-0_5	Chromium	52	J	µg/L	763		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-3	TCLP-3-0-0_5	Lead	2600		µg/L	1350		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-3	TCLP-3-0-0_5	Mercury		U	µg/L	0.11		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-3	TCLP-3-0-0_5	Selenium		U	µg/L	7.4		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-3	TCLP-3-0-0_5	Silver		U	µg/L	10.3		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-4	TCLP-4-0-0_5	Arsenic		U	µg/L	18.7	J	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-4	TCLP-4-0-0_5	Barium		U	µg/L	5.6	J	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-4	TCLP-4-0-0_5	Cadmium		U	µg/L	1.1	J	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-4	TCLP-4-0-0_5	Chromium		U	µg/L	0.67	J	mg/kg

Table A-8: Soil and TCLP Data Evaluation

Sample Group	Sample Date	Start Depth (Feet)	End Depth (Feet)	Site ID	Sample ID	Analyte	TCLP Concentration	TCLP Qualifier	TCLP Units	Metals Concentration	Metals Qualifier	Metals Units
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-4	TCLP-4-0-0_5	Lead	180	J	µg/L	49.2		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-4	TCLP-4-0-0_5	Mercury		U	µg/L		U	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-4	TCLP-4-0-0_5	Selenium		U	µg/L		U	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-4	TCLP-4-0-0_5	Silver		U	µg/L	0.073	J	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-5	TCLP-5-0-0_5	Arsenic		U	µg/L	318	J	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-5	TCLP-5-0-0_5	Barium		U	µg/L	20.7		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-5	TCLP-5-0-0_5	Cadmium		U	µg/L	0.58	J	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-5	TCLP-5-0-0_5	Chromium		U	µg/L	0.69	J	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-5	TCLP-5-0-0_5	Lead		U	µg/L	337		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-5	TCLP-5-0-0_5	Mercury	0.17	J	µg/L	0.52		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-5	TCLP-5-0-0_5	Selenium		U	µg/L	21.2		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-5	TCLP-5-0-0_5	Silver		U	µg/L	18.4		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-6	TCLP-6-0-0_5	Arsenic		U	µg/L	160	J	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-6	TCLP-6-0-0_5	Barium		U	µg/L	41.2		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-6	TCLP-6-0-0_5	Cadmium		U	µg/L	0.18	J	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-6	TCLP-6-0-0_5	Chromium		U	µg/L	1.1		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-6	TCLP-6-0-0_5	Lead		U	µg/L	436		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-6	TCLP-6-0-0_5	Mercury		U	µg/L	0.84		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-6	TCLP-6-0-0_5	Selenium		U	µg/L	14		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-6	TCLP-6-0-0_5	Silver		U	µg/L	18.9		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-7	TCLP-7-0-0_5	Arsenic		U	µg/L	64.6	J	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-7	TCLP-7-0-0_5	Barium	300	J	µg/L	34.3		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-7	TCLP-7-0-0_5	Cadmium	67		µg/L	2.6	J	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-7	TCLP-7-0-0_5	Chromium		U	µg/L	7.9		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-7	TCLP-7-0-0_5	Lead		U	µg/L	41.7		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-7	TCLP-7-0-0_5	Mercury		U	µg/L	0.097	J	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-7	TCLP-7-0-0_5	Selenium		U	µg/L	0.8	J	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-7	TCLP-7-0-0_5	Silver		U	µg/L		U	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-8	TCLP-8-0-0_5	Arsenic		U	µg/L	797	J	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-8	TCLP-8-0-0_5	Barium		U	µg/L	109		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-8	TCLP-8-0-0_5	Cadmium	120		µg/L	4.5	J	mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-8	TCLP-8-0-0_5	Chromium		U	µg/L	10.8		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-8	TCLP-8-0-0_5	Lead		U	µg/L	2000		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-8	TCLP-8-0-0_5	Mercury	0.2	J	µg/L	15.5		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-8	TCLP-8-0-0_5	Selenium		U	µg/L	19.5		mg/kg
Toxicity Characteristic Leaching Procedure	08-May-10	0	0.5	TCLP-8	TCLP-8-0-0_5	Silver		U	µg/L	11.3		mg/kg

Notes:

J = The analyte was positively identified, but the associated numerical value is estimated.

J+ = The analyte was positively identified, but the associated numerical value is estimated with a potential high bias.

J- = The analyte was positively identified, but the associated numerical value is estimated with a potential low bias.

U = The analyte was not positively identified at a concentration above the sample quantitation limit.

UJ = The analyte was not positively identified at a concentration above the sample quantitation limit and the associated numerical value was estimated.

mg/kg = Milligrams per kilogram

µg/L = Microgram(s) per liter.

SPLP = Synthetic Precipitation Leaching Procedure

Appendix B

EPA Region 9 Laboratory Analytical Reports

(Electronic on CD)

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street Building 201
Richmond, CA 94804

Date: **8/25/2010**

Subject: **Analytical Testing Results - Project R10S74**
SDG: 10126B

From: **Brenda Bettencourt, Director**
EPA Region 9 Laboratory
MTS-2

To: **Leah Butler**
Arizona and Navajo Site Section
SFD-6-2

Attached are the results from the analysis of samples from the **Iron King Mine May 2010 Field Investigation** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: Doug McReynolds, EA Engineering

Analyses included in this report:

Total Dissolved Solids

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager:	Leah Butler	**Arizona and Navajo Site Section**		**SDG:**	10126B
Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	08/25/10 12:45
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
ER # 2	1005006-01	Water	05/03/10 11:45	05/06/10 10:15
ER # 4	1005006-02	Water	05/04/10 08:00	05/06/10 10:15
GW-999948	1005006-03	Water	05/04/10 14:55	05/06/10 10:15
GW-999954	1005006-04	Water	05/03/10 13:00	05/06/10 10:15
MW-01-S	1005006-05	Water	05/04/10 12:15	05/06/10 10:15
MW-02-S	1005006-06	Water	05/03/10 16:20	05/06/10 10:15
MW-03-S	1005006-07	Water	05/03/10 13:10	05/06/10 10:15
MW-05-S	1005006-08	Water	05/04/10 17:15	05/06/10 10:15
MW-11-S	1005006-09	Water	05/04/10 12:15	05/06/10 10:15
ER # 6	1005009-01	Water	05/05/10 08:00	05/07/10 10:55
GW-999904	1005009-02	Water	05/06/10 10:25	05/07/10 10:55
GW=999947	1005009-03	Water	05/06/10 11:35	05/07/10 10:55
GW=9999904	1005009-04	Water	05/06/10 10:25	05/07/10 10:55
MW-04-S	1005009-05	Water	05/05/10 09:35	05/07/10 10:55
MW-06-D	1005009-06	Water	05/05/10 13:05	05/07/10 10:55
SW-08	1005009-07	Water	05/06/10 08:35	05/07/10 10:55

SDG ID 10126B

Work Order(s)

1005006

1005009

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager:	Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10126B
Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 08/25/10 12:45
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1005006-01									**Water - Sampled: 05/03/10 11:45**
Sample ID: ER # 2						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		ND	U	20	mg/L	B0E0018	05/07/10	05/07/10	2540C/SOP461
Lab ID: 1005006-02									**Water - Sampled: 05/04/10 08:00**
Sample ID: ER # 4						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		ND	U	20	mg/L	B0E0018	05/07/10	05/07/10	2540C/SOP461
Lab ID: 1005006-03									**Water - Sampled: 05/04/10 14:55**
Sample ID: GW-999948						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		490		20	mg/L	B0E0018	05/07/10	05/07/10	2540C/SOP461
Lab ID: 1005006-04									**Water - Sampled: 05/03/10 13:00**
Sample ID: GW-999954						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		7,300		20	mg/L	B0E0018	05/07/10	05/07/10	2540C/SOP461
Lab ID: 1005006-05									**Water - Sampled: 05/04/10 12:15**
Sample ID: MW-01-S						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		9,400		20	mg/L	B0E0018	05/07/10	05/07/10	2540C/SOP461
Lab ID: 1005006-06									**Water - Sampled: 05/03/10 16:20**
Sample ID: MW-02-S						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		560		20	mg/L	B0E0018	05/07/10	05/07/10	2540C/SOP461
Lab ID: 1005006-07									**Water - Sampled: 05/03/10 13:10**
Sample ID: MW-03-S						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		1,000		20	mg/L	B0E0018	05/07/10	05/07/10	2540C/SOP461
Lab ID: 1005006-08									**Water - Sampled: 05/04/10 17:15**
Sample ID: MW-05-S						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		3,200		20	mg/L	B0E0018	05/07/10	05/07/10	2540C/SOP461
Lab ID: 1005006-09									**Water - Sampled: 05/04/10 12:15**
Sample ID: MW-11-S						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		9,900		20	mg/L	B0E0018	05/07/10	05/07/10	2540C/SOP461
Lab ID: 1005009-01									**Water - Sampled: 05/05/10 08:00**
Sample ID: ER # 6						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		ND	U	20	mg/L	B0E0022	05/10/10	05/10/10	2540C/SOP461
Lab ID: 1005009-02									**Water - Sampled: 05/06/10 10:25**
Sample ID: GW-999904						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		980		20	mg/L	B0E0022	05/10/10	05/10/10	2540C/SOP461
Lab ID: 1005009-03									**Water - Sampled: 05/06/10 11:35**
Sample ID: GW=999947						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		2,200		20	mg/L	B0E0022	05/10/10	05/10/10	2540C/SOP461
Lab ID: 1005009-04									**Water - Sampled: 05/06/10 10:25**
Sample ID: GW=9999904						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		1,000		20	mg/L	B0E0022	05/10/10	05/10/10	2540C/SOP461
Lab ID: 1005009-05									**Water - Sampled: 05/05/10 09:35**

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager:	Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10126B
Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 08/25/10 12:45
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1005009-05									**Water - Sampled: 05/05/10 09:35**
Sample ID: MW-04-S						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		3,000		20	mg/L	B0E0022	05/10/10	05/10/10	2540C/SOP461
Lab ID: 1005009-06									**Water - Sampled: 05/05/10 13:05**
Sample ID: MW-06-D						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		430		20	mg/L	B0E0022	05/10/10	05/10/10	2540C/SOP461
Lab ID: 1005009-07									**Water - Sampled: 05/06/10 08:35**
Sample ID: SW-08						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		1,200		20	mg/L	B0E0022	05/10/10	05/10/10	2540C/SOP461

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B0E0018 - - General Biology - Solids, Total Dissolved										**Prepared & Analyzed: 05/07/10**
						Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control				
Blank (B0E0018-BLK1)										
Total Dissolved Solids	ND	U	20	mg/L						
Duplicate (B0E0018-DUP1)		**Source: 1005006-05**								
Total Dissolved Solids	9,400		20	mg/L		9,400			0.5	5
Duplicate (B0E0018-DUP2)		**Source: 1005007-11**								
Total Dissolved Solids	90		20	mg/L		93			3	5
Reference (B0E0018-SRM1)										
Total Dissolved Solids	3,300			mg/L	3360		98	85-115		
Batch B0E0022 - - General Biology - Solids, Total Dissolved										**Prepared & Analyzed: 05/10/10**
						Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control				
Blank (B0E0022-BLK1)										
Total Dissolved Solids	ND	U	20	mg/L						
Duplicate (B0E0022-DUP1)		**Source: 1005009-02**								
Total Dissolved Solids	990		20	mg/L		980			0.6	5
Reference (B0E0022-SRM1)										
Total Dissolved Solids	3,300			mg/L	3360		98	85-115		

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager:	Leah Butler	**Arizona and Navajo Site Section**		**SDG:**	10126B
Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	08/25/10 12:45
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

Qualifiers and Comments

U	Not Detected
NR	Not Reported
RE1, RE2, etc:	Result is from a sample re-analysis.

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street Building 201
Richmond, CA 94804

Subject: **Analytical Testing Results - Project R10S74**
SDG: 10131A

From: **Brenda Bettencourt, Director**
EPA Region 9 Laboratory
MTS-2

To: **Leah Butler**
Arizona and Navajo Site Section
SFD-6-2

Attached are the results from the analysis of samples from the **Iron King Mine May 2010 Field Investigation** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: Doug McReynolds, EA Enginnering

Analyses included in this report:

Total Dissolved Solids

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager:	Leah Butler	**Arizona and Navajo Site Section**		**SDG:**	10131A
Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	05/27/10 11:10
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
GW-999912	1005010-01	Water	05/08/10 11:00	05/11/10 09:45
GW-999945	1005010-02	Water	05/08/10 13:32	05/11/10 09:45
GW-999959	1005010-03	Water	05/08/10 12:25	05/11/10 09:45
GW-999960	1005010-04	Water	05/07/10 14:02	05/11/10 09:45
GW-999961	1005010-05	Water	05/08/10 08:40	05/11/10 09:45
GW-9999959	1005010-06	Water	05/08/10 12:25	05/11/10 09:45
GW-999903	1005010-07	Water	05/06/10 17:07	05/11/10 09:45
GW-999909	1005010-08	Water	05/06/10 15:20	05/11/10 09:45
GW-999924	1005010-09	Water	05/06/10 16:10	05/11/10 09:45
GW-999930	1005010-10	Water	05/06/10 13:55	05/11/10 09:45
GW-999957	1005010-11	Water	05/07/10 12:30	05/11/10 09:45
GW-999958	1005010-12	Water	05/07/10 11:02	05/11/10 09:45
GW-9999958	1005010-13	Water	05/07/10 11:02	05/11/10 09:45
GW-999907	1005020-01	Water	05/11/10 14:22	05/13/10 13:50
GW-999927	1005020-02	Water	05/10/10 17:22	05/13/10 13:50
GW-999931	1005020-03	Water	05/11/10 13:34	05/13/10 13:50
GW-999951	1005020-04	Water	05/10/10 14:25	05/13/10 13:50
GW-999952	1005020-05	Water	05/10/10 14:54	05/13/10 13:50
GW-999956	1005020-06	Water	05/10/10 13:48	05/13/10 13:50
GW-999962	1005020-07	Water	05/10/10 15:27	05/13/10 13:50
GW-9999956	1005020-08	Water	05/10/10 13:48	05/13/10 13:50
GW-9999962	1005020-09	Water	05/10/10 15:27	05/13/10 13:50

SDG ID 10131A

Work Order(s)

1005010

1005020

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager:	Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10131A
Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 05/27/10 11:10
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1005010-01									**Water - Sampled: 05/08/10 11:00**
Sample ID: GW-999912						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		440		20	mg/L	B0E0028	05/12/10	05/12/10	2540C/SOP461
Lab ID: 1005010-02									**Water - Sampled: 05/08/10 13:32**
Sample ID: GW-999945						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		2,000		20	mg/L	B0E0028	05/12/10	05/12/10	2540C/SOP461
Lab ID: 1005010-03									**Water - Sampled: 05/08/10 12:25**
Sample ID: GW-999959						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		28,000		20	mg/L	B0E0045	05/14/10	05/14/10	2540C/SOP461
Lab ID: 1005010-04									**Water - Sampled: 05/07/10 14:02**
Sample ID: GW-999960						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		520		20	mg/L	B0E0028	05/12/10	05/12/10	2540C/SOP461
Lab ID: 1005010-05									**Water - Sampled: 05/08/10 08:40**
Sample ID: GW-999961						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		540		20	mg/L	B0E0028	05/12/10	05/12/10	2540C/SOP461
Lab ID: 1005010-06									**Water - Sampled: 05/08/10 12:25**
Sample ID: GW-9999959						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		540		20	mg/L	B0E0028	05/12/10	05/12/10	2540C/SOP461
Lab ID: 1005010-07									**Water - Sampled: 05/06/10 17:07**
Sample ID: GW-999903						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		690		20	mg/L	B0E0028	05/12/10	05/12/10	2540C/SOP461
Lab ID: 1005010-08									**Water - Sampled: 05/06/10 15:20**
Sample ID: GW-999909						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		700		20	mg/L	B0E0028	05/12/10	05/12/10	2540C/SOP461
Lab ID: 1005010-09									**Water - Sampled: 05/06/10 16:10**
Sample ID: GW-999924						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		350		20	mg/L	B0E0028	05/12/10	05/12/10	2540C/SOP461
Lab ID: 1005010-10									**Water - Sampled: 05/06/10 13:55**
Sample ID: GW-999930						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		370		20	mg/L	B0E0028	05/12/10	05/12/10	2540C/SOP461
Lab ID: 1005010-11									**Water - Sampled: 05/07/10 12:30**
Sample ID: GW-999957						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		460		20	mg/L	B0E0028	05/12/10	05/12/10	2540C/SOP461
Lab ID: 1005010-12									**Water - Sampled: 05/07/10 11:02**
Sample ID: GW-999958						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		670		20	mg/L	B0E0028	05/12/10	05/12/10	2540C/SOP461
Lab ID: 1005010-13									**Water - Sampled: 05/07/10 11:02**
Sample ID: GW-9999958						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		620		20	mg/L	B0E0028	05/12/10	05/12/10	2540C/SOP461
Lab ID: 1005020-01									**Water - Sampled: 05/11/10 14:22**

United States Environmental Protection Agency
Region 9 Laboratory
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Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager:	Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10131A
Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 05/27/10 11:10
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1005020-01									**Water - Sampled: 05/11/10 14:22**
Sample ID: GW-999907						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		400		20	mg/L	B0E0045	05/14/10	05/14/10	2540C/SOP461
Lab ID: 1005020-02									**Water - Sampled: 05/10/10 17:22**
Sample ID: GW-999927						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		350		20	mg/L	B0E0045	05/14/10	05/14/10	2540C/SOP461
Lab ID: 1005020-03									**Water - Sampled: 05/11/10 13:34**
Sample ID: GW-999931						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		450		20	mg/L	B0E0045	05/14/10	05/14/10	2540C/SOP461
Lab ID: 1005020-04									**Water - Sampled: 05/10/10 14:25**
Sample ID: GW-999951						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		320		20	mg/L	B0E0045	05/14/10	05/14/10	2540C/SOP461
Lab ID: 1005020-05									**Water - Sampled: 05/10/10 14:54**
Sample ID: GW-999952						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		560		20	mg/L	B0E0045	05/14/10	05/14/10	2540C/SOP461
Lab ID: 1005020-06									**Water - Sampled: 05/10/10 13:48**
Sample ID: GW-999956						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		460		20	mg/L	B0E0045	05/14/10	05/14/10	2540C/SOP461
Lab ID: 1005020-07									**Water - Sampled: 05/10/10 15:27**
Sample ID: GW-999962						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		550		20	mg/L	B0E0045	05/14/10	05/14/10	2540C/SOP461
Lab ID: 1005020-08									**Water - Sampled: 05/10/10 13:48**
Sample ID: GW-9999956						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		450		20	mg/L	B0E0045	05/14/10	05/14/10	2540C/SOP461
Lab ID: 1005020-09									**Water - Sampled: 05/10/10 15:27**
Sample ID: GW-9999962						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		550		20	mg/L	B0E0045	05/14/10	05/14/10	2540C/SOP461

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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**		**SDG:**	10131A
Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	05/27/10 11:10
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B0E0028 - - General Biology - Solids, Total Dissolved										**Prepared & Analyzed: 05/12/10**
						Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control				
Blank (B0E0028-BLK1)										
Total Dissolved Solids	ND	U	20	mg/L						
Duplicate (B0E0028-DUP1)		**Source: 1005010-04**								
Total Dissolved Solids	500		20	mg/L		520			4	5
Duplicate (B0E0028-DUP2)		**Source: 1005010-12**								
Total Dissolved Solids	660		20	mg/L		670			2	5
Reference (B0E0028-SRM1)										
Total Dissolved Solids	3,300			mg/L	3360		98	85-115		
Batch B0E0045 - - General Biology - Solids, Total Dissolved										**Prepared & Analyzed: 05/14/10**
						Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control				
Blank (B0E0045-BLK1)										
Total Dissolved Solids	ND	U	20	mg/L						
Duplicate (B0E0045-DUP1)		**Source: 1005020-05**								
Total Dissolved Solids	550		20	mg/L		560			2	5
Reference (B0E0045-SRM1)										
Total Dissolved Solids	3,300			mg/L	3360		99	85-115		

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**		**SDG:**	10131A
Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	05/27/10 11:10
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

Qualifiers and Comments

J	The reported result for this analyte should be considered an estimated value.
U	Not Detected
NR	Not Reported
RE1, RE2, etc:	Result is from a sample re-analysis.

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street Building 201
Richmond, CA 94804

Subject: **Analytical Testing Results - Project R10S74**
SDG: 10134B

From: **Brenda Bettencourt, Director**
EPA Region 9 Laboratory
MTS-2

To: **Leah Butler**
Arizona and Navajo Site Section
SFD-6-2

Attached are the results from the analysis of samples from the **Iron King Mine May 2010 Field Investigation** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: Doug McReynolds, EA Enginnering

Analyses included in this report:

Total Dissolved Solids

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager:	Leah Butler	**Arizona and Navajo Site Section**		**SDG:**	10134B
Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	05/27/10 11:13
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
GW-999902	1005024-01	Water	05/11/10 08:40	05/14/10 10:40
GW-999913	1005024-02	Water	05/13/10 09:22	05/14/10 10:40
GW-999914	1005024-03	Water	05/13/10 08:36	05/14/10 10:40
GW-999955	1005024-04	Water	05/11/10 09:43	05/14/10 10:40
GW-999963	1005024-05	Water	05/12/10 10:20	05/14/10 10:40
GW-999964	1005024-06	Water	05/12/10 10:36	05/14/10 10:40
GW-999965	1005024-07	Water	05/13/10 11:45	05/14/10 10:40
GW-999966	1005024-08	Water	05/13/10 15:45	05/14/10 10:40
GW-9999963	1005024-09	Water	05/12/10 10:20	05/14/10 10:40

SDG ID 10134B

Work Order(s)

1005024

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager:	Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10134B
Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 05/27/10 11:13
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1005024-01									**Water - Sampled: 05/11/10 08:40**
Sample ID: GW-999902						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		400		20	mg/L	B0E0050	05/17/10	05/17/10	2540C/SOP461
Lab ID: 1005024-02									**Water - Sampled: 05/13/10 09:22**
Sample ID: GW-999913						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		360		20	mg/L	B0E0050	05/17/10	05/17/10	2540C/SOP461
Lab ID: 1005024-03									**Water - Sampled: 05/13/10 08:36**
Sample ID: GW-999914						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		370		20	mg/L	B0E0050	05/17/10	05/17/10	2540C/SOP461
Lab ID: 1005024-04									**Water - Sampled: 05/11/10 09:43**
Sample ID: GW-999955						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		360		20	mg/L	B0E0050	05/17/10	05/17/10	2540C/SOP461
Lab ID: 1005024-05									**Water - Sampled: 05/12/10 10:20**
Sample ID: GW-999963						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		600		20	mg/L	B0E0050	05/17/10	05/17/10	2540C/SOP461
Lab ID: 1005024-06									**Water - Sampled: 05/12/10 10:36**
Sample ID: GW-999964						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		280		20	mg/L	B0E0050	05/17/10	05/17/10	2540C/SOP461
Lab ID: 1005024-07									**Water - Sampled: 05/13/10 11:45**
Sample ID: GW-999965						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		390		20	mg/L	B0E0050	05/17/10	05/17/10	2540C/SOP461
Lab ID: 1005024-08									**Water - Sampled: 05/13/10 15:45**
Sample ID: GW-999966						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		1,200		20	mg/L	B0E0050	05/17/10	05/17/10	2540C/SOP461
Lab ID: 1005024-09									**Water - Sampled: 05/12/10 10:20**
Sample ID: GW-9999963						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Total Dissolved Solids		600		20	mg/L	B0E0050	05/17/10	05/17/10	2540C/SOP461

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B0E0050 - - General Biology - Solids, Total Dissolved										**Prepared & Analyzed: 05/17/10**
						Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control				
Blank (B0E0050-BLK1)										
Total Dissolved Solids	ND	U	20	mg/L						
Duplicate (B0E0050-DUP1)		**Source: 1005024-04**								
Total Dissolved Solids	360		20	mg/L		360			1	5
Duplicate (B0E0050-DUP2)		**Source: 1005024-06**								
Total Dissolved Solids	280		20	mg/L		280			0.4	5
Reference (B0E0050-SRM1)										
Total Dissolved Solids	3,300			mg/L	3360		98	85-115		

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager:	Leah Butler	**Arizona and Navajo Site Section**		**SDG:**	10134B
Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	05/27/10 11:13
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

Qualifiers and Comments

J	The reported result for this analyte should be considered an estimated value.
U	Not Detected
NR	Not Reported
RE1, RE2, etc:	Result is from a sample re-analysis.

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street Building 201
Richmond, CA 94804

Subject: **Analytical Testing Results - Project R10S74**
SDG: 10124B

From: **Brenda Bettencourt, Director**
EPA Region 9 Laboratory
MTS-2

To: **Leah Butler**
Arizona and Navajo Site Section
SFD-6-2

Attached are the results from the analysis of samples from the **Iron King Mine May 2010 Field Investigation** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: Doug McReynolds, EA Enginnering

Analyses included in this report:

Anions by Ion Chromatography	Percent Solids

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager:	Leah Butler	**Arizona and Navajo Site Section**		**SDG:**	10124B
Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	05/28/10 12:08
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
BKG-111-0-2	1005003-01	Soil	05/02/10 15:12	05/04/10 10:40
BKG-112-0-2	1005003-02	Soil	05/02/10 15:26	05/04/10 10:40
BKG-113-0-2	1005003-03	Soil	05/02/10 15:35	05/04/10 10:40
BKG-114-0-2	1005003-04	Soil	05/02/10 15:45	05/04/10 10:40
BKG-115-0-2	1005003-05	Soil	05/02/10 15:59	05/04/10 10:40
BKG-116-0-2	1005003-06	Soil	05/02/10 16:10	05/04/10 10:40
BKG-117-0-2	1005003-07	Soil	05/02/10 16:18	05/04/10 10:40
BKG-118-0-2	1005003-08	Soil	05/02/10 16:30	05/04/10 10:40
BKG-119-0-2	1005003-09	Soil	05/02/10 16:40	05/04/10 10:40
BKG-120-0-2	1005003-10	Soil	05/02/10 16:50	05/04/10 10:40
BKG-121-0-2	1005003-11	Soil	05/02/10 17:29	05/04/10 10:40
BKG-122-0-2	1005003-12	Soil	05/02/10 17:36	05/04/10 10:40
BKG-123-0-2	1005003-13	Soil	05/02/10 17:45	05/04/10 10:40
BKG-124-0-2	1005003-14	Soil	05/02/10 17:52	05/04/10 10:40
BKG-125-0-2	1005003-15	Soil	05/02/10 18:00	05/04/10 10:40
BKG-126-0-2	1005003-16	Soil	05/02/10 18:07	05/04/10 10:40
BKG-127-0-2	1005003-17	Soil	05/02/10 18:13	05/04/10 10:40
BKG-128-0-2	1005003-18	Soil	05/02/10 18:20	05/04/10 10:40
BKG-129-0-2	1005003-19	Soil	05/02/10 18:26	05/04/10 10:40
BKG-130-0-2	1005003-20	Soil	05/02/10 18:33	05/04/10 10:40
BKG-930-0-2	1005003-21	Soil	05/02/10 18:33	05/04/10 10:40
TCLP-1-0-0_5	1005003-22	Soil	05/03/10 13:40	05/04/10 10:40
TCLP-11-0-0_5	1005003-23	Soil	05/03/10 13:40	05/04/10 10:40

SDG ID 10124B

Work Order(s)

1005003

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager:	Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10124B
Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 05/28/10 12:08
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: **1005003-01**									**Soil - Sampled: 05/02/10 15:12**
Sample ID: **BKG-111-0-2**									
						Conventional Chemistry Parameters by APHA/EPA Methods			
Sulfate		6.4		5.3	mg/kg dry	B0E0044	05/14/10	05/14/10	300.0/SOP 530
% Solids		95		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: **1005003-02**									**Soil - Sampled: 05/02/10 15:26**
Sample ID: **BKG-112-0-2**									
						Conventional Chemistry Parameters by APHA/EPA Methods			
Sulfate		15		5.4	mg/kg dry	B0E0044	05/14/10	05/14/10	300.0/SOP 530
% Solids		92		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: **1005003-03**									**Soil - Sampled: 05/02/10 15:35**
Sample ID: **BKG-113-0-2**									
						Conventional Chemistry Parameters by APHA/EPA Methods			
Sulfate		4.6	C1, J	5.3	mg/kg dry	B0E0044	05/14/10	05/14/10	300.0/SOP 530
% Solids		94		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: **1005003-04**									**Soil - Sampled: 05/02/10 15:45**
Sample ID: **BKG-114-0-2**									
						Conventional Chemistry Parameters by APHA/EPA Methods			
Sulfate		31		5.4	mg/kg dry	B0E0044	05/14/10	05/14/10	300.0/SOP 530
% Solids		93		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: **1005003-05**									**Soil - Sampled: 05/02/10 15:59**
Sample ID: **BKG-115-0-2**									
						Conventional Chemistry Parameters by APHA/EPA Methods			
Sulfate		86		5.3	mg/kg dry	B0E0044	05/14/10	05/14/10	300.0/SOP 530
% Solids		94		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: **1005003-06**									**Soil - Sampled: 05/02/10 16:10**
Sample ID: **BKG-116-0-2**									
						Conventional Chemistry Parameters by APHA/EPA Methods			
Sulfate		44		5.4	mg/kg dry	B0E0044	05/14/10	05/14/10	300.0/SOP 530
% Solids		93		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: **1005003-07**									**Soil - Sampled: 05/02/10 16:18**
Sample ID: **BKG-117-0-2**									
						Conventional Chemistry Parameters by APHA/EPA Methods			
Sulfate		16		5.7	mg/kg dry	B0E0044	05/14/10	05/14/10	300.0/SOP 530
% Solids		87		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: **1005003-08**									**Soil - Sampled: 05/02/10 16:30**
Sample ID: **BKG-118-0-2**									
						Conventional Chemistry Parameters by APHA/EPA Methods			
Sulfate		8.1		5.4	mg/kg dry	B0E0044	05/14/10	05/14/10	300.0/SOP 530
% Solids		93		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: **1005003-09**									**Soil - Sampled: 05/02/10 16:40**
Sample ID: **BKG-119-0-2**									
						Conventional Chemistry Parameters by APHA/EPA Methods			
Sulfate		33		5.4	mg/kg dry	B0E0044	05/14/10	05/14/10	300.0/SOP 530
% Solids		92		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: **1005003-10**									**Soil - Sampled: 05/02/10 16:50**
Sample ID: **BKG-120-0-2**									
						Conventional Chemistry Parameters by APHA/EPA Methods			
Sulfate		51		5.4	mg/kg dry	B0E0044	05/14/10	05/14/10	300.0/SOP 530
% Solids		92		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: **1005003-11**									**Soil - Sampled: 05/02/10 17:29**

United States Environmental Protection Agency
Region 9 Laboratory
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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10124B
Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 05/28/10 12:08
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1005003-11									**Soil - Sampled: 05/02/10 17:29**
Sample ID: BKG-121-0-2									**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		ND	U	5.4	mg/kg dry	B0E0044	05/14/10	05/14/10	300.0/SOP 530
% Solids		92		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: 1005003-12									**Soil - Sampled: 05/02/10 17:36**
Sample ID: BKG-122-0-2									**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		ND	U	5.5	mg/kg dry	B0E0044	05/14/10	05/14/10	300.0/SOP 530
% Solids		91		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: 1005003-13									**Soil - Sampled: 05/02/10 17:45**
Sample ID: BKG-123-0-2									**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		3.3	C1, J	5.6	mg/kg dry	B0E0044	05/14/10	05/14/10	300.0/SOP 530
% Solids		89		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: 1005003-14									**Soil - Sampled: 05/02/10 17:52**
Sample ID: BKG-124-0-2									**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		7.8		5.5	mg/kg dry	B0E0044	05/14/10	05/14/10	300.0/SOP 530
% Solids		91		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: 1005003-15									**Soil - Sampled: 05/02/10 18:00**
Sample ID: BKG-125-0-2									**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		ND	U	5.6	mg/kg dry	B0E0044	05/14/10	05/14/10	300.0/SOP 530
% Solids		89		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: 1005003-16									**Soil - Sampled: 05/02/10 18:07**
Sample ID: BKG-126-0-2									**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		2.8	C1, J	5.6	mg/kg dry	B0E0044	05/14/10	05/14/10	300.0/SOP 530
% Solids		90		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: 1005003-17									**Soil - Sampled: 05/02/10 18:13**
Sample ID: BKG-127-0-2									**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		ND	U	5.5	mg/kg dry	B0E0044	05/14/10	05/14/10	300.0/SOP 530
% Solids		91		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: 1005003-18									**Soil - Sampled: 05/02/10 18:20**
Sample ID: BKG-128-0-2									**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		ND	U	5.4	mg/kg dry	B0E0044	05/14/10	05/14/10	300.0/SOP 530
% Solids		93		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: 1005003-19									**Soil - Sampled: 05/02/10 18:26**
Sample ID: BKG-129-0-2									**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		4.8	C1, J	5.7	mg/kg dry	B0E0044	05/14/10	05/14/10	300.0/SOP 530
% Solids		87		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: 1005003-20									**Soil - Sampled: 05/02/10 18:33**
Sample ID: BKG-130-0-2									**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		3.6	C1, J	5.6	mg/kg dry	B0E0044	05/14/10	05/14/10	300.0/SOP 530
% Solids		89		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: 1005003-21									**Soil - Sampled: 05/02/10 18:33**

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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**		**SDG:**	10124B
Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	05/28/10 12:08
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Sample ID: **BKG-930-0-2**						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Sulfate		4.9	C1, J	5.7	mg/kg dry	B0E0044	05/14/10	05/14/10	300.0/SOP 530
% Solids		88		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: **1005003-22**								**Soil - Sampled: 05/03/10 13:40**	
Sample ID: **TCLP-1-0-0_5**						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Sulfate		11,000		120	mg/kg dry	B0E0044	05/14/10	05/15/10	300.0/SOP 530
% Solids		81		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460
Lab ID: **1005003-23**								**Soil - Sampled: 05/03/10 13:40**	
Sample ID: **TCLP-11-0-0_5**						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Sulfate		7,900		120	mg/kg dry	B0E0044	05/14/10	05/17/10	300.0/SOP 530
% Solids		81		1	%	B0E0013	05/05/10	05/07/10	3550C/SOP460

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Project Manager: Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10124B	
Project Number: R10S74	**75 Hawthorne Street**	**Reported:** 05/28/10 12:08	
Project: Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**		

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B0E0013 - Solids, Dry Weight (Prep) - Solids, Dry Weight									**Prepared: 05/05/10 Analyzed: 05/07/10**	
									Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control	
Blank (B0E0013-BLK1)										
% Solids	ND	U	1	%						
Blank (B0E0013-BLK2)										
% Solids	ND	U	1	%						
Duplicate (B0E0013-DUP1)		**Source: 1005003-20**								
% Solids	90		1	%		89			1	20
Duplicate (B0E0013-DUP2)		**Source: 1005003-22**								
% Solids	81		1	%		81			0	20
Batch B0E0044 - -Water Extract Inorg - Anions									**Prepared & Analyzed: 05/14/10**	
									Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control	
Blank (B0E0044-BLK1)										
Sulfate	ND	U	5	mg/kg wet						
Blank (B0E0044-BLK2)										
Sulfate	ND	U	5	mg/kg wet						
LCS (B0E0044-BS1)										
Sulfate	102		5	mg/kg wet	101		100	90-110		
LCS (B0E0044-BS2)										
Sulfate	102		5	mg/kg wet	101		101	90-110		
Duplicate (B0E0044-DUP1)		**Source: 1005003-22**								
Sulfate	12,800		250	mg/kg dry		10,700			18	20
Matrix Spike (B0E0044-MS1)		**Source: 1005003-05**								
Sulfate	199		5.3	mg/kg dry	109	86.3	103	80-120		
Matrix Spike (B0E0044-MS2)		**Source: 1005003-20**								
Sulfate	118		5.6	mg/kg dry	113	3.6	101	80-120		
Matrix Spike Dup (B0E0044-MSD1)		**Source: 1005003-05**								
Sulfate	201		5.3	mg/kg dry	108	86.3	107	80-120	1	20
Matrix Spike Dup (B0E0044-MSD2)		**Source: 1005003-20**								
Sulfate	118		5.6	mg/kg dry	114	3.6	101	80-120	0.1	20

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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**		**SDG:**	10124B
Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	05/28/10 12:08
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

Qualifiers and Comments

J	The reported result for this analyte should be considered an estimated value.
C1	The reported concentration for this analyte is below the quantitation limit.
U	Not Detected
NR	Not Reported
RE1, RE2, etc:	Result is from a sample re-analysis.

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street Building 201
Richmond, CA 94804

Subject: **Analytical Testing Results - Project R10S74**
SDG: 10126B

From: **Brenda Bettencourt, Director**
EPA Region 9 Laboratory
MTS-2

To: **Leah Butler**
Arizona and Navajo Site Section
SFD-6-2

Attached are the results from the analysis of samples from the **Iron King Mine May 2010 Field Investigation** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: Doug McReynolds, EA Enginnering

Analyses included in this report:

Anions by Ion Chromatography

Total Kjeldahl Nitrogen

United States Environmental Protection Agency
Region 9 Laboratory
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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**		**SDG:**	10126B
Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	06/14/10 11:17
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
ER # 2	1005006-01	Water	05/03/10 11:45	05/06/10 10:15
ER # 4	1005006-02	Water	05/04/10 08:00	05/06/10 10:15
GW-999948	1005006-03	Water	05/04/10 14:55	05/06/10 10:15
GW-999954	1005006-04	Water	05/03/10 13:00	05/06/10 10:15
MW-01-S	1005006-05	Water	05/04/10 12:15	05/06/10 10:15
MW-02-S	1005006-06	Water	05/03/10 16:20	05/06/10 10:15
MW-03-S	1005006-07	Water	05/03/10 13:10	05/06/10 10:15
MW-05-S	1005006-08	Water	05/04/10 17:15	05/06/10 10:15
MW-11-S	1005006-09	Water	05/04/10 12:15	05/06/10 10:15
ER # 6	1005009-01	Water	05/05/10 08:00	05/07/10 10:55
GW-999904	1005009-02	Water	05/06/10 10:25	05/07/10 10:55
GW=999947	1005009-03	Water	05/06/10 11:35	05/07/10 10:55
GW=9999904	1005009-04	Water	05/06/10 10:25	05/07/10 10:55
MW-04-S	1005009-05	Water	05/05/10 09:35	05/07/10 10:55
MW-06-D	1005009-06	Water	05/05/10 13:05	05/07/10 10:55
SW-08	1005009-07	Water	05/06/10 08:35	05/07/10 10:55

SDG ID 10126B

Work Order(s)

1005006

1005009

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager:	Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10126B
Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 06/14/10 11:17
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1005006-01									**Water - Sampled: 05/03/10 11:45**
Sample ID: ER # 2									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		ND	U	0.10	mg/L	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Chloride	RE1	ND	U	1	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Bromide		ND	U	0.10	"	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Sulfate		ND	U	0.50	"	"	"	"	300.0/SOP 530
Nitrogen, Total Kjeldahl		0.12		0.10	"	B0E0062	05/18/10	05/18/10	351.2/SOP592
Lab ID: 1005006-02									**Water - Sampled: 05/04/10 08:00**
Sample ID: ER # 4									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		ND	U	0.10	mg/L	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Chloride	RE1	ND	U	1	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Bromide		ND	U	0.10	"	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Sulfate		ND	U	0.50	"	"	"	"	300.0/SOP 530
Nitrogen, Total Kjeldahl		0.06	C1, J	0.10	"	B0E0062	05/18/10	05/18/10	351.2/SOP592
Lab ID: 1005006-03									**Water - Sampled: 05/04/10 14:55**
Sample ID: GW-999948									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		2.3		0.10	mg/L	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Chloride	RE1	16		1	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Bromide		0.12		0.10	"	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Sulfate		23		0.50	"	"	"	"	300.0/SOP 530
Nitrogen, Total Kjeldahl		ND	U	0.10	"	B0E0062	05/18/10	05/18/10	351.2/SOP592
Lab ID: 1005006-04									**Water - Sampled: 05/03/10 13:00**
Sample ID: GW-999954									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		1.1		0.10	mg/L	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Chloride	RE1	68		2	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Bromide		0.45		0.10	"	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Sulfate	RE1	4,500		100	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Lab ID: 1005006-05									**Water - Sampled: 05/04/10 12:15**
Sample ID: MW-01-S									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		0.72		0.10	mg/L	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Chloride	RE1	4,100		100	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Bromide		18		0.10	"	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Sulfate	RE1	500		5	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Nitrogen, Total Kjeldahl		36		2	"	B0E0062	05/18/10	05/18/10	351.2/SOP592
Lab ID: 1005006-06									**Water - Sampled: 05/03/10 16:20**
Sample ID: MW-02-S									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		0.16		0.10	mg/L	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Chloride	RE1	29		1	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Bromide		0.20		0.10	"	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Sulfate	RE1	200		5	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Nitrogen, Total Kjeldahl		ND	U	0.10	"	B0E0062	05/18/10	05/18/10	351.2/SOP592

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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10126B
Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 06/14/10 11:17
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1005006-06									**Water - Sampled: 05/03/10 16:20**
Lab ID: 1005006-07									**Water - Sampled: 05/03/10 13:10**
Sample ID: MW-03-S						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Fluoride		0.12		0.10	mg/L	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Chloride	RE1	73		2	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Bromide		0.54		0.10	"	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Sulfate	RE1	390		10	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Nitrogen, Total Kjeldahl		ND	U	0.10	"	B0E0062	05/18/10	05/18/10	351.2/SOP592
Lab ID: 1005006-08									**Water - Sampled: 05/04/10 17:15**
Sample ID: MW-05-S						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Fluoride		0.38		0.10	mg/L	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Chloride	RE1	6.7		1	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Bromide		0.23		0.10	"	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Sulfate	RE1	1,800		50	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Nitrogen, Total Kjeldahl		0.06	C1, J	0.10	"	B0E0062	05/18/10	05/18/10	351.2/SOP592
Lab ID: 1005006-09									**Water - Sampled: 05/04/10 12:15**
Sample ID: MW-11-S						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Fluoride		0.72		0.10	mg/L	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Chloride	RE1	4,300		100	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Bromide		19		0.10	"	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Sulfate	RE1	460		5	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Nitrogen, Total Kjeldahl		63		2	"	B0E0062	05/18/10	05/18/10	351.2/SOP592
Lab ID: 1005009-01									**Water - Sampled: 05/05/10 08:00**
Sample ID: ER # 6						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Fluoride		ND	U	0.10	mg/L	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Chloride	RE1	ND	U	1	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Bromide		ND	U	0.10	"	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Sulfate		ND	U	0.50	"	"	"	"	300.0/SOP 530
Nitrogen, Total Kjeldahl		0.07	C1, J	0.10	"	B0E0093	05/24/10	05/25/10	351.2/SOP592
Lab ID: 1005009-02									**Water - Sampled: 05/06/10 10:25**
Sample ID: GW-999904						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Fluoride		0.18		0.10	mg/L	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Chloride	RE1	190		5	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Bromide		1.4		0.10	"	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Sulfate	RE1	170		2.5	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Nitrogen, Total Kjeldahl		ND	J, Q4, Q6, U	0.10	"	B0E0093	05/24/10	05/25/10	351.2/SOP592
Lab ID: 1005009-03									**Water - Sampled: 05/06/10 11:35**
Sample ID: GW=999947						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Fluoride		0.26		0.10	mg/L	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Chloride	RE1	760		50	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Bromide		3.3		0.10	"	B0E0106	05/26/10	05/26/10	300.0/SOP 530

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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10126B
Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 06/14/10 11:17
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1005009-03									**Water - Sampled: 05/06/10 11:35**
Sample ID: GW=999947									
						Conventional Chemistry Parameters by APHA/EPA Methods			
Sulfate	RE1	170		5	mg/L	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Nitrogen, Total Kjeldahl		2.3		0.10	"	B0E0093	05/24/10	05/25/10	351.2/SOP592
Lab ID: 1005009-04									**Water - Sampled: 05/06/10 10:25**
Sample ID: GW=9999904									
						Conventional Chemistry Parameters by APHA/EPA Methods			
Fluoride		0.20		0.10	mg/L	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Chloride	RE1	180		10	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Bromide		1.5		0.10	"	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Sulfate	RE1	160		5	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Nitrogen, Total Kjeldahl		ND	U	0.10	"	B0E0093	05/24/10	05/25/10	351.2/SOP592
Lab ID: 1005009-05									**Water - Sampled: 05/05/10 09:35**
Sample ID: MW-04-S									
						Conventional Chemistry Parameters by APHA/EPA Methods			
Fluoride	RE2	ND	U	0.10	mg/L	B0F0011	06/02/10	06/02/10	300.0/SOP 530
Chloride	RE1	53		2	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Bromide		0.34		0.10	"	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Sulfate	RE1	1,600		50	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Nitrogen, Total Kjeldahl		0.07	C1, J	0.10	"	B0E0093	05/24/10	05/25/10	351.2/SOP592
Lab ID: 1005009-06									**Water - Sampled: 05/05/10 13:05**
Sample ID: MW-06-D									
						Conventional Chemistry Parameters by APHA/EPA Methods			
Fluoride		0.30		0.10	mg/L	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Chloride	RE1	53		5	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Bromide		0.53		0.10	"	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Sulfate	RE1	72		2.5	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Nitrogen, Total Kjeldahl		0.16		0.10	"	B0E0093	05/24/10	05/25/10	351.2/SOP592
Lab ID: 1005009-07									**Water - Sampled: 05/06/10 08:35**
Sample ID: SW-08									
						Conventional Chemistry Parameters by APHA/EPA Methods			
Fluoride		0.20		0.10	mg/L	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Chloride	RE1	67		2	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530
Bromide		0.48		0.10	"	B0E0106	05/26/10	05/26/10	300.0/SOP 530
Sulfate	RE1	620		25	"	B0F0007	06/01/10	06/01/10	300.0/SOP 530

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Project Manager: Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10126B
Project Number: R10S74	**75 Hawthorne Street**	**Reported:** 06/14/10 11:17
Project: Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B0E0062 - 351.2/365.1 TKN/T-P - Nitrogen, Total Kjeldahl										**Prepared & Analyzed: 05/18/10**
								Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control		
Blank (B0E0062-BLK1)										
Nitrogen, Total Kjeldahl	ND	U	0.1	mg/L						
LCS (B0E0062-BS1)										
Nitrogen, Total Kjeldahl	0.947		0.1	mg/L	1.00		95	90-110		
Matrix Spike (B0E0062-MS3)		**Source: 1005006-05**								
Nitrogen, Total Kjeldahl	29	Q10	2	mg/L	2.00	36	**NR**	90-110		
Matrix Spike Dup (B0E0062-MSD3)		**Source: 1005006-05**								
Nitrogen, Total Kjeldahl	25.8	Q10	2	mg/L	2.00	36	**NR**	90-110	12	20
Batch B0E0093 - 351.2/365.1 TKN/T-P - Nitrogen, Total Kjeldahl										**Prepared: 05/24/10 Analyzed: 05/25/10**
								Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control		
Blank (B0E0093-BLK1)										
Nitrogen, Total Kjeldahl	ND	U	0.1	mg/L						
LCS (B0E0093-BS1)										
Nitrogen, Total Kjeldahl	0.99		0.1	mg/L	1.00		99	90-110		
Matrix Spike (B0E0093-MS1)		**Source: 1005009-02**								
Nitrogen, Total Kjeldahl	0.498		0.1	mg/L	2.00	ND	**25**	90-110		
Matrix Spike Dup (B0E0093-MSD1)		**Source: 1005009-02**								
Nitrogen, Total Kjeldahl	1.42		0.1	mg/L	2.00	ND	**71**	90-110	**96**	20
Batch B0E0106 - - General Inorganic - Anions										**Prepared & Analyzed: 05/26/10**
								Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control		
Blank (B0E0106-BLK1)										
Fluoride	ND	U	0.1	mg/L						
Chloride	ND	U	1	"						
Bromide	ND	U	0.1	"						
Sulfate	ND	U	0.5	"						
LCS (B0E0106-BS1)										
Fluoride	5.08			mg/L	5.00		102	90-110		
Bromide	5.18			"	5.00		104	90-110		
Sulfate	9.54			"	10.1		94	90-110		
Matrix Spike (B0E0106-MS1)		**Source: 1005006-05**								
Fluoride	5.86		0.11	mg/L	5.38	0.717	96	80-120		
Bromide	24.1		0.11	"	5.38	18.4	106	80-120		
Matrix Spike (B0E0106-MS2)		**Source: 1005009-02**								
Fluoride	5.88		0.11	mg/L	5.38	0.176	106	80-120		
Bromide	7.15		0.11	"	5.38	1.45	106	80-120		
Matrix Spike Dup (B0E0106-MSD1)		**Source: 1005006-05**								
Fluoride	5.75		0.11	mg/L	5.38	0.717	94	80-120	2	20
Bromide	24		0.11	"	5.38	18.4	105	80-120	0.4	20
Matrix Spike Dup (B0E0106-MSD2)		**Source: 1005009-02**								
Fluoride	5.82		0.11	mg/L	5.38	0.176	105	80-120	0.9	20
Bromide	7.15		0.11	"	5.38	1.45	106	80-120	0.05	20

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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10126B
Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 06/14/10 11:17
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B0F0007 - - General Inorganic - Anions										**Prepared & Analyzed: 06/01/10**
										Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control
Blank (B0F0007-BLK1)										
Fluoride	ND	U	0.1	mg/L						
Chloride	ND	U	1	"						
Bromide	ND	U	0.1	"						
Sulfate	ND	U	0.5	"						
LCS (B0F0007-BS1)										
Chloride	9.74			mg/L	10.1		96	90-110		
Sulfate	9.4			"	10.1		93	90-110		
Duplicate (B0F0007-DUP1)		**Source: 1005006-05RE1**								
Chloride	4,220		100	mg/L		4,140			2	20
Sulfate	456		5	"		501			9	20
Duplicate (B0F0007-DUP2)		**Source: 1005009-02RE1**								
Chloride	188		5	mg/L		190			1	20
Sulfate	171		2.5	"		170			0.07	20
Batch B0F0011 - - General Inorganic - Anions										**Prepared & Analyzed: 06/02/10**
										Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control
Blank (B0F0011-BLK1)										
Fluoride	ND	U	0.1	mg/L						
Chloride	ND	U	1	"						
Bromide	ND	U	0.1	"						
Sulfate	ND	U	0.5	"						
LCS (B0F0011-BS1)										
Fluoride	4.88		0.1	mg/L	5.00		98	90-110		
Chloride	9.76		1	"	10.1		97	90-110		
Bromide	5.06		0.1	"	5.00		101	90-110		
Sulfate	9.96		0.5	"	10.1		99	90-110		

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Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	06/14/10 11:17
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

Qualifiers and Comments

Q6	Matrix spike/matrix spike duplicate precision criteria were not met for this analyte (see MS/MSD results for this batch in QC summary).
Q4	The matrix spike and/or matrix spike duplicate associated with this sample did not meet recovery criteria for this analyte (see MS/MSD results for this batch in QC summary)
Q10	The analyte concentration in the unfortified sample is significantly greater than the concentration spiked into the matrix spike and matrix spike duplicate. The reported spike recovery is not a meaningful measure of the dataset's analytical accuracy.
J	The reported result for this analyte should be considered an estimated value.
C1	The reported concentration for this analyte is below the quantitation limit.
U	Not Detected
NR	Not Reported
RE1, RE2, etc:	Result is from a sample re-analysis.

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street Building 201
Richmond, CA 94804

Subject: **Analytical Testing Results - Project R10S74**
SDG: 10131A

From: **Brenda Bettencourt, Director**
EPA Region 9 Laboratory
MTS-2

To: **Leah Butler**
Arizona and Navajo Site Section
SFD-6-2

Attached are the results from the analysis of samples from the **Iron King Mine May 2010 Field Investigation** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: Doug McReynolds, EA Enginnering

Analyses included in this report:

Anions by Ion Chromatography

Total Kjeldahl Nitrogen

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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**		**SDG:**	10131A
Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	06/14/10 11:23
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
GW-999912	1005010-01	Water	05/08/10 11:00	05/11/10 09:45
GW-999945	1005010-02	Water	05/08/10 13:32	05/11/10 09:45
GW-999959	1005010-03	Water	05/08/10 12:25	05/11/10 09:45
GW-999960	1005010-04	Water	05/07/10 14:02	05/11/10 09:45
GW-999961	1005010-05	Water	05/08/10 08:40	05/11/10 09:45
GW-9999959	1005010-06	Water	05/08/10 12:25	05/11/10 09:45
GW-999903	1005010-07	Water	05/06/10 17:07	05/11/10 09:45
GW-999909	1005010-08	Water	05/06/10 15:20	05/11/10 09:45
GW-999924	1005010-09	Water	05/06/10 16:10	05/11/10 09:45
GW-999930	1005010-10	Water	05/06/10 13:55	05/11/10 09:45
GW-999957	1005010-11	Water	05/07/10 12:30	05/11/10 09:45
GW-999958	1005010-12	Water	05/07/10 11:02	05/11/10 09:45
GW-9999958	1005010-13	Water	05/07/10 11:02	05/11/10 09:45
GW-999907	1005020-01	Water	05/11/10 14:22	05/13/10 13:50
GW-999927	1005020-02	Water	05/10/10 17:22	05/13/10 13:50
GW-999931	1005020-03	Water	05/11/10 13:34	05/13/10 13:50
GW-999951	1005020-04	Water	05/10/10 14:25	05/13/10 13:50
GW-999952	1005020-05	Water	05/10/10 14:54	05/13/10 13:50
GW-999956	1005020-06	Water	05/10/10 13:48	05/13/10 13:50
GW-999962	1005020-07	Water	05/10/10 15:27	05/13/10 13:50
GW-9999956	1005020-08	Water	05/10/10 13:48	05/13/10 13:50
GW-9999962	1005020-09	Water	05/10/10 15:27	05/13/10 13:50

SDG ID 10131A

Work Order(s)

1005010

1005020

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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10131A
Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 06/14/10 11:23
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1005010-01									**Water - Sampled: 05/08/10 11:00**
Sample ID: GW-999912						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Fluoride		0.16		0.10	mg/L	B0F0011	06/02/10	06/02/10	300.0/SOP 530
Chloride		68		2	"	"	"	06/02/10	300.0/SOP 530
Bromide		0.39		0.10	"	"	"	06/02/10	300.0/SOP 530
Sulfate		39		0.50	"	"	"	"	300.0/SOP 530
Nitrogen, Total Kjeldahl		ND	U	0.10	"	B0E0093	05/24/10	05/25/10	351.2/SOP592
Lab ID: 1005010-02									**Water - Sampled: 05/08/10 13:32**
Sample ID: GW-999945						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Fluoride		0.20		0.10	mg/L	B0F0011	06/02/10	06/02/10	300.0/SOP 530
Chloride		32		1	"	"	"	"	300.0/SOP 530
Bromide		0.24		0.10	"	"	"	"	300.0/SOP 530
Sulfate		1,300		25	"	"	"	06/02/10	300.0/SOP 530
Lab ID: 1005010-03									**Water - Sampled: 05/08/10 12:25**
Sample ID: GW-999959						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Fluoride		0.36	C1, J	0.50	mg/L	B0F0011	06/02/10	06/02/10	300.0/SOP 530
Chloride		67		5	"	"	"	"	300.0/SOP 530
Bromide		0.21		0.10	"	"	"	06/02/10	300.0/SOP 530
Sulfate		150		2.5	"	"	"	06/02/10	300.0/SOP 530
Nitrogen, Total Kjeldahl		ND	U	0.10	"	B0E0093	05/24/10	05/25/10	351.2/SOP592
Lab ID: 1005010-04									**Water - Sampled: 05/07/10 14:02**
Sample ID: GW-999960						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Fluoride		0.14		0.10	mg/L	B0F0011	06/02/10	06/02/10	300.0/SOP 530
Chloride		40		1	"	"	"	"	300.0/SOP 530
Bromide		0.34		0.10	"	"	"	"	300.0/SOP 530
Sulfate		81		2.5	"	"	"	06/02/10	300.0/SOP 530
Nitrogen, Total Kjeldahl		ND	J, Q4, Q6, U	0.10	"	B0E0093	05/24/10	05/25/10	351.2/SOP592
Lab ID: 1005010-05									**Water - Sampled: 05/08/10 08:40**
Sample ID: GW-999961						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Fluoride		0.13		0.10	mg/L	B0F0011	06/02/10	06/02/10	300.0/SOP 530
Chloride		65		5	"	"	"	06/02/10	300.0/SOP 530
Bromide		0.37		0.10	"	"	"	06/02/10	300.0/SOP 530
Sulfate		64		2.5	"	"	"	06/02/10	300.0/SOP 530
Nitrogen, Total Kjeldahl		ND	U	0.10	"	B0E0093	05/24/10	05/25/10	351.2/SOP592
Lab ID: 1005010-06									**Water - Sampled: 05/08/10 12:25**
Sample ID: GW-9999959						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Fluoride		0.15		0.10	mg/L	B0F0011	06/02/10	06/02/10	300.0/SOP 530
Chloride		66		5	"	"	"	06/02/10	300.0/SOP 530
Bromide		0.24		0.10	"	"	"	06/02/10	300.0/SOP 530
Sulfate		74		2.5	"	"	"	06/02/10	300.0/SOP 530
Nitrogen, Total Kjeldahl		ND	U	0.10	"	B0E0093	05/24/10	05/25/10	351.2/SOP592

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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10131A
Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 06/14/10 11:23
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1005010-07									**Water - Sampled: 05/06/10 17:07**
Sample ID: GW-999903									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		0.16		0.10	mg/L	B0F0011	06/02/10	06/02/10	300.0/SOP 530
Chloride		47		1	"	"	"	"	300.0/SOP 530
Bromide		0.29		0.10	"	"	"	"	300.0/SOP 530
Sulfate		270		5	"	"	"	06/02/10	300.0/SOP 530
Lab ID: 1005010-08									**Water - Sampled: 05/06/10 15:20**
Sample ID: GW-999909									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		0.23		0.10	mg/L	B0F0011	06/02/10	06/02/10	300.0/SOP 530
Chloride		130		10	"	"	"	06/02/10	300.0/SOP 530
Bromide		0.97		0.10	"	"	"	06/02/10	300.0/SOP 530
Sulfate		43		0.50	"	"	"	"	300.0/SOP 530
Lab ID: 1005010-09									**Water - Sampled: 05/06/10 16:10**
Sample ID: GW-999924									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		0.16		0.10	mg/L	B0F0011	06/02/10	06/02/10	300.0/SOP 530
Chloride		30		1	"	"	"	"	300.0/SOP 530
Bromide		0.28		0.10	"	"	"	"	300.0/SOP 530
Sulfate		25		0.50	"	"	"	"	300.0/SOP 530
Nitrogen, Total Kjeldahl		ND	U	0.10	"	B0E0093	05/24/10	05/25/10	351.2/SOP592
Lab ID: 1005010-10									**Water - Sampled: 05/06/10 13:55**
Sample ID: GW-999930									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		0.49		0.10	mg/L	B0F0011	06/02/10	06/02/10	300.0/SOP 530
Chloride		47		1	"	"	"	"	300.0/SOP 530
Bromide		0.25		0.10	"	"	"	"	300.0/SOP 530
Sulfate		24		0.50	"	"	"	"	300.0/SOP 530
Nitrogen, Total Kjeldahl		ND	U	0.10	"	B0E0093	05/24/10	05/25/10	351.2/SOP592
Lab ID: 1005010-11									**Water - Sampled: 05/07/10 12:30**
Sample ID: GW-999957									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		0.12		0.10	mg/L	B0F0011	06/02/10	06/02/10	300.0/SOP 530
Chloride		50		1	"	"	"	"	300.0/SOP 530
Bromide		0.35		0.10	"	"	"	"	300.0/SOP 530
Sulfate		49		0.50	"	"	"	"	300.0/SOP 530
Nitrogen, Total Kjeldahl		ND	U	0.10	"	B0E0093	05/24/10	05/25/10	351.2/SOP592
Lab ID: 1005010-12									**Water - Sampled: 05/07/10 11:02**
Sample ID: GW-999958									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		0.62		0.10	mg/L	B0F0011	06/02/10	06/02/10	300.0/SOP 530
Chloride		54		10	"	"	"	06/02/10	300.0/SOP 530
Bromide		0.29		0.10	"	"	"	06/02/10	300.0/SOP 530
Sulfate		220		5	"	"	"	06/02/10	300.0/SOP 530
Lab ID: 1005010-13									**Water - Sampled: 05/07/10 11:02**
Sample ID: GW-9999958									**Conventional Chemistry Parameters by APHA/EPA Methods**

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Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager:	Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10131A
Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 06/14/10 11:23
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1005010-13									**Water - Sampled: 05/07/10 11:02**
Sample ID: GW-9999958									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		0.62		0.10	mg/L	B0F0011	06/02/10	06/02/10	300.0/SOP 530
Chloride		55		10	"	"	"	06/02/10	300.0/SOP 530
Bromide		0.27		0.10	"	"	"	06/02/10	300.0/SOP 530
Sulfate		220		5	"	"	"	06/02/10	300.0/SOP 530
Lab ID: 1005020-01									**Water - Sampled: 05/11/10 14:22**
Sample ID: GW-999907									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		0.29		0.10	mg/L	B0F0016	06/03/10	06/04/10	300.0/SOP 530
Chloride		42		1	"	"	"	"	300.0/SOP 530
Bromide		0.39		0.10	"	"	"	"	300.0/SOP 530
Sulfate		34		0.50	"	"	"	"	300.0/SOP 530
Nitrogen, Total Kjeldahl		ND	U	0.10	"	B0E0093	05/24/10	05/25/10	351.2/SOP592
Lab ID: 1005020-02									**Water - Sampled: 05/10/10 17:22**
Sample ID: GW-999927									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		0.49		0.10	mg/L	B0F0016	06/03/10	06/04/10	300.0/SOP 530
Chloride		36		1	"	"	"	"	300.0/SOP 530
Bromide		0.29		0.10	"	"	"	"	300.0/SOP 530
Sulfate		17		0.50	"	"	"	"	300.0/SOP 530
Nitrogen, Total Kjeldahl		ND	J, Q4, U	0.10	"	B0E0093	05/24/10	05/25/10	351.2/SOP592
Lab ID: 1005020-03									**Water - Sampled: 05/11/10 13:34**
Sample ID: GW-999931									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		0.09	C1, J	0.10	mg/L	B0F0016	06/03/10	06/04/10	300.0/SOP 530
Chloride		41		1	"	"	"	"	300.0/SOP 530
Bromide		0.18		0.10	"	"	"	"	300.0/SOP 530
Sulfate	RE1	58		1	"	B0F0025	06/05/10	06/05/10	300.0/SOP 530
Lab ID: 1005020-04									**Water - Sampled: 05/10/10 14:25**
Sample ID: GW-999951									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		0.25		0.10	mg/L	B0F0016	06/03/10	06/04/10	300.0/SOP 530
Chloride		34		1	"	"	"	"	300.0/SOP 530
Bromide		0.20		0.10	"	"	"	"	300.0/SOP 530
Sulfate		44		0.50	"	"	"	"	300.0/SOP 530
Lab ID: 1005020-05									**Water - Sampled: 05/10/10 14:54**
Sample ID: GW-999952									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		0.97		0.10	mg/L	B0F0016	06/03/10	06/04/10	300.0/SOP 530
Chloride		35		1	"	"	"	"	300.0/SOP 530
Bromide		0.18		0.10	"	"	"	"	300.0/SOP 530
Sulfate	RE1	52		1	"	B0F0025	06/05/10	06/05/10	300.0/SOP 530
Lab ID: 1005020-06									**Water - Sampled: 05/10/10 13:48**
Sample ID: GW-999956									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		1.5		0.10	mg/L	B0F0016	06/03/10	06/04/10	300.0/SOP 530

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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10131A
Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 06/14/10 11:23
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1005020-06									**Water - Sampled: 05/10/10 13:48**
Sample ID: GW-999956						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Chloride		48		1	mg/L	B0F0016	06/03/10	06/04/10	300.0/SOP 530
Bromide		0.28		0.10	"	"	"	"	300.0/SOP 530
Sulfate		32		0.50	"	"	"	"	300.0/SOP 530
Nitrogen, Total Kjeldahl		ND	U	0.10	"	B0E0093	05/24/10	05/25/10	351.2/SOP592
Lab ID: 1005020-07									**Water - Sampled: 05/10/10 15:27**
Sample ID: GW-999962						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Fluoride		0.92		0.10	mg/L	B0F0016	06/03/10	06/04/10	300.0/SOP 530
Chloride		35		1	"	"	"	"	300.0/SOP 530
Bromide		0.16		0.10	"	"	"	"	300.0/SOP 530
Sulfate	RE1	52		1	"	B0F0025	06/05/10	06/05/10	300.0/SOP 530
Lab ID: 1005020-08									**Water - Sampled: 05/10/10 13:48**
Sample ID: GW-9999956						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Fluoride		1.5		0.10	mg/L	B0F0016	06/03/10	06/04/10	300.0/SOP 530
Chloride		48		1	"	"	"	"	300.0/SOP 530
Bromide		0.28		0.10	"	"	"	"	300.0/SOP 530
Sulfate		32		0.50	"	"	"	"	300.0/SOP 530
Nitrogen, Total Kjeldahl		ND	U	0.10	"	B0E0093	05/24/10	05/25/10	351.2/SOP592
Lab ID: 1005020-09									**Water - Sampled: 05/10/10 15:27**
Sample ID: GW-9999962						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Fluoride		0.94		0.10	mg/L	B0F0016	06/03/10	06/04/10	300.0/SOP 530
Chloride		34		1	"	"	"	"	300.0/SOP 530
Bromide		0.20		0.10	"	"	"	"	300.0/SOP 530
Sulfate	RE1	52		1	"	B0F0025	06/05/10	06/05/10	300.0/SOP 530

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Project Manager: Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10131A	
Project Number: R10S74	**75 Hawthorne Street**	**Reported:** 06/14/10 11:23	
Project: Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**		

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B0E0093 - 351.2/365.1 TKN/T-P - Nitrogen, Total Kjeldahl									**Prepared: 05/24/10 Analyzed: 05/25/10**	
								Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control		
Blank (B0E0093-BLK1)										
Nitrogen, Total Kjeldahl	ND	U	0.1	mg/L						
LCS (B0E0093-BS1)										
Nitrogen, Total Kjeldahl	0.99		0.1	mg/L	1.00		99	90-110		
Matrix Spike (B0E0093-MS2)		**Source: 1005010-04**								
Nitrogen, Total Kjeldahl	1.05		0.1	mg/L	2.00	ND	**52**	90-110		
Matrix Spike (B0E0093-MS3)		**Source: 1005020-02**								
Nitrogen, Total Kjeldahl	1.09		0.1	mg/L	2.00	ND	**54**	90-110		
Matrix Spike Dup (B0E0093-MSD2)		**Source: 1005010-04**								
Nitrogen, Total Kjeldahl	1.6		0.1	mg/L	2.00	ND	**80**	90-110	**42**	20
Matrix Spike Dup (B0E0093-MSD3)		**Source: 1005020-02**								
Nitrogen, Total Kjeldahl	1.18		0.1	mg/L	2.00	ND	**59**	90-110	8	20
Batch B0F0011 - - General Inorganic - Anions									**Prepared & Analyzed: 06/02/10**	
								Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control		
Blank (B0F0011-BLK1)										
Fluoride	ND	U	0.1	mg/L						
Chloride	ND	U	1	"						
Bromide	ND	U	0.1	"						
Sulfate	ND	U	0.5	"						
LCS (B0F0011-BS1)										
Fluoride	4.88		0.1	mg/L	5.00		98	90-110		
Chloride	9.76		1	"	10.1		97	90-110		
Bromide	5.06		0.1	"	5.00		101	90-110		
Sulfate	9.96		0.5	"	10.1		99	90-110		
Duplicate (B0F0011-DUP1)		**Source: 1005010-04**								
Chloride	39.6		1	mg/L		40			1	20
Sulfate	81		2.5	"		81			0.1	20
Duplicate (B0F0011-DUP2)		**Source: 1005010-12**								
Chloride	54.3		10	mg/L		54.4			0.04	20
Sulfate	217		5	"		221			2	20
Matrix Spike (B0F0011-MS1)		**Source: 1005010-04**								
Fluoride	5.47		0.11	mg/L	5.49	0.137	97	80-120		
Bromide	5.84		0.11	"	5.49	0.338	100	80-120		
Matrix Spike (B0F0011-MS2)		**Source: 1005010-12**								
Fluoride	6.02		0.11	mg/L	5.49	0.622	98	80-120		
Bromide	5.81		0.11	"	5.49	0.294	100	80-120		
Matrix Spike Dup (B0F0011-MSD1)		**Source: 1005010-04**								
Fluoride	5.51		0.11	mg/L	5.49	0.137	98	80-120	0.7	20
Bromide	5.88		0.11	"	5.49	0.338	101	80-120	0.7	20
Matrix Spike Dup (B0F0011-MSD2)		**Source: 1005010-12**								
Fluoride	6.04		0.11	mg/L	5.49	0.622	99	80-120	0.4	20

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Project Number: R10S74	**75 Hawthorne Street**	**Reported:** 06/14/10 11:23	
Project: Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**		

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B0F0011 - - General Inorganic - Anions										**Prepared & Analyzed: 06/02/10**
								Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control		
Matrix Spike Dup (B0F0011-MSD2)		**Source: 1005010-12**								
Bromide	5.83		0.11	"	5.49	0.294	101	80-120	0.4	20
Batch B0F0016 - - General Inorganic - Anions										**Prepared & Analyzed: 06/03/10**
								Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control		
Blank (B0F0016-BLK1)										
Fluoride	ND	U	0.1	mg/L						
Chloride	ND	U	1	"						
Bromide	ND	U	0.1	"						
Sulfate	ND	U	0.5	"						
Blank (B0F0016-BLK2)										
Fluoride	ND	U	0.1	mg/L						
Chloride	ND	U	1	"						
Bromide	ND	U	0.1	"						
Sulfate	ND	U	0.5	"						
LCS (B0F0016-BS1)										
Fluoride	4.77		0.1	mg/L	5.00		95	90-110		
Chloride	9.69		1	"	10.1		96	90-110		
Nitrite as N	4.74		0.1	"	4.99		95	90-110		
Bromide	4.97		0.1	"	5.00		99	90-110		
Nitrate as N	4.97		0.1	"	5.00		99	90-110		
Sulfate	9.95		0.5	"	10.1		99	90-110		
LCS (B0F0016-BS2)										
Fluoride	4.92		0.1	mg/L	5.00		98	90-110		
Chloride	9.81		1	"	10.1		97	90-110		
Nitrite as N	4.84		0.1	"	4.99		97	90-110		
Bromide	5.08		0.1	"	5.00		102	90-110		
Nitrate as N	5.05		0.1	"	5.00		101	90-110		
Sulfate	9.99		0.5	"	10.1		99	90-110		
Duplicate (B0F0016-DUP2)		**Source: 1005020-06**								
Chloride	47.5		1	mg/L		48.3			2	20
Matrix Spike (B0F0016-MS4)		**Source: 1005020-06**								
Fluoride	6.53		0.11	mg/L	5.49	1.49	92	80-120		
Bromide	5.41		0.11	"	5.49	0.285	93	80-120		
Sulfate	41.9		0.55	"	11.1	31.6	93	80-120		
Matrix Spike Dup (B0F0016-MSD4)		**Source: 1005020-06**								
Fluoride	6.43		0.11	mg/L	5.49	1.49	90	80-120	2	20
Bromide	5.31		0.11	"	5.49	0.285	91	80-120	2	20
Sulfate	41.8		0.55	"	11.1	31.6	92	80-120	0.2	20
Batch B0F0025 - - General Inorganic - Anions										**Prepared & Analyzed: 06/05/10**
								Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control		
Blank (B0F0025-BLK1)										
Fluoride	ND	U	0.1	mg/L						

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Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	06/14/10 11:23
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B0F0025 - - General Inorganic - Anions										**Prepared & Analyzed: 06/05/10**
										Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control
Blank (B0F0025-BLK1)										
Chloride	ND	U	1	"						
Bromide	ND	U	0.1	"						
Sulfate	ND	U	0.5	"						
LCS (B0F0025-BS1)										
Fluoride	4.73			mg/L	5.00		95	90-110		
Chloride	9.63			"	10.1		95	90-110		
Nitrite as N	4.69			"	4.99		94	90-110		
Bromide	4.97			"	5.00		99	90-110		
Nitrate as N	4.95			"	5.00		99	90-110		
Sulfate	9.83			"	10.1		97	90-110		

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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**		**SDG:**	10131A
Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	06/14/10 11:23
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

Qualifiers and Comments

Q6 Matrix spike/matrix spike duplicate precision criteria were not met for this analyte (see MS/MSD results for this batch in QC summary).

Q4 The matrix spike and/or matrix spike duplicate associated with this sample did not meet recovery criteria for this analyte (see MS/MSD results for this batch in QC summary)

J The reported result for this analyte should be considered an estimated value.

C1 The reported concentration for this analyte is below the quantitation limit.

U Not Detected

NR Not Reported

RE1, RE2, etc: Result is from a sample re-analysis.

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street Building 201
Richmond, CA 94804

Subject: **Analytical Testing Results - Project R10S74**
SDG: 10131B

From: **Brenda Bettencourt, Director**
EPA Region 9 Laboratory
MTS-2

To: **Leah Butler**
Arizona and Navajo Site Section
SFD-6-2

Attached are the results from the analysis of samples from the **Iron King Mine May 2010 Field Investigation** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: Doug McReynolds, EA Enginnering

Analyses included in this report:

Anions by Ion Chromatography	Percent Solids

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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**		**SDG:**	10131B
Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	06/01/10 14:59
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
TCLP-12-0-0_5	1005011-01	Soil	05/08/10 08:16	05/11/10 11:30
TCLP-2-0-0_5	1005011-02	Soil	05/08/10 08:16	05/11/10 11:30
TCLP-3-0-0_5	1005011-03	Soil	05/08/10 09:45	05/11/10 11:30
TCLP-4-0-0_5	1005011-04	Soil	05/08/10 09:58	05/11/10 11:30
TCLP-5-0-0_5	1005011-05	Soil	05/08/10 10:24	05/11/10 11:30
TCLP-6-0-0_5	1005011-06	Soil	05/08/10 10:34	05/11/10 11:30
TCLP-7-0-0_5	1005011-07	Soil	05/08/10 10:54	05/11/10 11:30
TCLP-8-0-0_5	1005011-08	Soil	05/08/10 11:56	05/11/10 11:30
BKG-131-0-2	1005021-01	Soil	05/12/10 08:20	05/13/10 14:20
BKG-132-0-2	1005021-02	Soil	05/12/10 08:20	05/13/10 14:20
BKG-133-0-2	1005021-03	Soil	05/12/10 08:20	05/13/10 14:20
BKG-134-0-2	1005021-04	Soil	05/12/10 08:20	05/13/10 14:20
BKG-135-0-2	1005021-05	Soil	05/12/10 08:20	05/13/10 14:20
BKG-136-0-2	1005021-06	Soil	05/12/10 08:20	05/13/10 14:20
BKG-137-0-2	1005021-07	Soil	05/12/10 08:20	05/13/10 14:20
BKG-138-0-2	1005021-08	Soil	05/12/10 08:20	05/13/10 14:20
BKG-139-0-2	1005021-09	Soil	05/12/10 08:20	05/13/10 14:20
BKG-140-0-2	1005021-10	Soil	05/12/10 08:20	05/13/10 14:20
BKG-940-0-2	1005021-11	Soil	05/12/10 08:20	05/13/10 14:20

SDG ID 10131B

Work Order(s)

1005011

1005021

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager:	Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10131B
Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 06/01/10 14:59
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID:	**1005011-01**								**Soil - Sampled: 05/08/10 08:16**
Sample ID:	**TCLP-12-0-0_5**								**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		110,000		6,000	mg/kg dry	B0E0074	05/20/10	05/20/10	300.0/SOP 530
% Solids		84		1	%	B0E0052	05/17/10	05/18/10	3550C/SOP460
Lab ID:	**1005011-02**								**Soil - Sampled: 05/08/10 08:16**
Sample ID:	**TCLP-2-0-0_5**								**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		120,000		6,000	mg/kg dry	B0E0074	05/20/10	05/20/10	300.0/SOP 530
% Solids		84		1	%	B0E0052	05/17/10	05/18/10	3550C/SOP460
Lab ID:	**1005011-03**								**Soil - Sampled: 05/08/10 09:45**
Sample ID:	**TCLP-3-0-0_5**								**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		120		5.6	mg/kg dry	B0E0074	05/20/10	05/20/10	300.0/SOP 530
% Solids		90		1	%	B0E0052	05/17/10	05/18/10	3550C/SOP460
Lab ID:	**1005011-04**								**Soil - Sampled: 05/08/10 09:58**
Sample ID:	**TCLP-4-0-0_5**								**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		ND	U	5	mg/kg dry	B0E0074	05/20/10	05/20/10	300.0/SOP 530
% Solids		100		1	%	B0E0052	05/17/10	05/18/10	3550C/SOP460
Lab ID:	**1005011-05**								**Soil - Sampled: 05/08/10 10:24**
Sample ID:	**TCLP-5-0-0_5**								**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		38,000		520	mg/kg dry	B0E0074	05/20/10	05/21/10	300.0/SOP 530
% Solids		96		1	%	B0E0052	05/17/10	05/18/10	3550C/SOP460
Lab ID:	**1005011-06**								**Soil - Sampled: 05/08/10 10:34**
Sample ID:	**TCLP-6-0-0_5**								**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		60,000		1,100	mg/kg dry	B0E0074	05/20/10	05/21/10	300.0/SOP 530
% Solids		88		1	%	B0E0052	05/17/10	05/18/10	3550C/SOP460
Lab ID:	**1005011-07**								**Soil - Sampled: 05/08/10 10:54**
Sample ID:	**TCLP-7-0-0_5**								**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		210		6.1	mg/kg dry	B0E0074	05/20/10	05/20/10	300.0/SOP 530
% Solids		82		1	%	B0E0052	05/17/10	05/18/10	3550C/SOP460
Lab ID:	**1005011-08**								**Soil - Sampled: 05/08/10 11:56**
Sample ID:	**TCLP-8-0-0_5**								**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		64,000		1,200	mg/kg dry	B0E0074	05/20/10	05/21/10	300.0/SOP 530
% Solids		82		1	%	B0E0052	05/17/10	05/18/10	3550C/SOP460
Lab ID:	**1005021-01**								**Soil - Sampled: 05/12/10 08:20**
Sample ID:	**BKG-131-0-2**								**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		ND	U	5.3	mg/kg dry	B0E0074	05/20/10	05/20/10	300.0/SOP 530
% Solids		94		1	%	B0E0051	05/17/10	05/18/10	3550C/SOP460
Lab ID:	**1005021-02**								**Soil - Sampled: 05/12/10 08:20**
Sample ID:	**BKG-132-0-2**								**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		ND	U	5.3	mg/kg dry	B0E0074	05/20/10	05/20/10	300.0/SOP 530
% Solids		94		1	%	B0E0051	05/17/10	05/18/10	3550C/SOP460
Lab ID:	**1005021-03**								**Soil - Sampled: 05/12/10 08:20**

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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10131B
Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 06/01/10 14:59
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Sample ID: **BKG-133-0-2**									**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		ND	U	5.7	mg/kg dry	B0E0074	05/20/10	05/21/10	300.0/SOP 530
% Solids		88		1	%	B0E0051	05/17/10	05/18/10	3550C/SOP460
Lab ID: **1005021-04**									**Soil - Sampled: 05/12/10 08:20**
Sample ID: **BKG-134-0-2**									**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		5.7		5.7	mg/kg dry	B0E0074	05/20/10	05/21/10	300.0/SOP 530
% Solids		88		1	%	B0E0051	05/17/10	05/18/10	3550C/SOP460
Lab ID: **1005021-05**									**Soil - Sampled: 05/12/10 08:20**
Sample ID: **BKG-135-0-2**									**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		ND	U	5.6	mg/kg dry	B0E0074	05/20/10	05/21/10	300.0/SOP 530
% Solids		89		1	%	B0E0051	05/17/10	05/18/10	3550C/SOP460
Lab ID: **1005021-06**									**Soil - Sampled: 05/12/10 08:20**
Sample ID: **BKG-136-0-2**									**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		4.3	C1, J	5.7	mg/kg dry	B0E0074	05/20/10	05/21/10	300.0/SOP 530
% Solids		88		1	%	B0E0051	05/17/10	05/18/10	3550C/SOP460
Lab ID: **1005021-07**									**Soil - Sampled: 05/12/10 08:20**
Sample ID: **BKG-137-0-2**									**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		5.5	C1, J	5.6	mg/kg dry	B0E0074	05/20/10	05/21/10	300.0/SOP 530
% Solids		89		1	%	B0E0051	05/17/10	05/18/10	3550C/SOP460
Lab ID: **1005021-08**									**Soil - Sampled: 05/12/10 08:20**
Sample ID: **BKG-138-0-2**									**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		ND	U	5.8	mg/kg dry	B0E0074	05/20/10	05/21/10	300.0/SOP 530
% Solids		86		1	%	B0E0051	05/17/10	05/18/10	3550C/SOP460
Lab ID: **1005021-09**									**Soil - Sampled: 05/12/10 08:20**
Sample ID: **BKG-139-0-2**									**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		3.4	C1, J	5.6	mg/kg dry	B0E0074	05/20/10	05/21/10	300.0/SOP 530
% Solids		89		1	%	B0E0051	05/17/10	05/18/10	3550C/SOP460
Lab ID: **1005021-10**									**Soil - Sampled: 05/12/10 08:20**
Sample ID: **BKG-140-0-2**									**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		ND	U	5.7	mg/kg dry	B0E0074	05/20/10	05/20/10	300.0/SOP 530
% Solids		88		1	%	B0E0051	05/17/10	05/18/10	3550C/SOP460
Lab ID: **1005021-11**									**Soil - Sampled: 05/12/10 08:20**
Sample ID: **BKG-940-0-2**									**Conventional Chemistry Parameters by APHA/EPA Methods**
Sulfate		ND	U	5.6	mg/kg dry	B0E0074	05/20/10	05/20/10	300.0/SOP 530
% Solids		89		1	%	B0E0051	05/17/10	05/18/10	3550C/SOP460

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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**		**SDG:**	10131B
Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	06/01/10 14:59
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B0E0051 - Solids, Dry Weight (Prep) - Solids, Dry Weight									**Prepared: 05/17/10 Analyzed: 05/18/10**	
									Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control	
Blank (B0E0051-BLK1)										
% Solids	18		1	%						
Duplicate (B0E0051-DUP1)		**Source: 1005021-10**								
% Solids	89		1	%		88			1	20
Batch B0E0052 - Solids, Dry Weight (Prep) - Solids, Dry Weight									**Prepared: 05/17/10 Analyzed: 05/18/10**	
									Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control	
Blank (B0E0052-BLK1)										
% Solids	ND	U	1	%						
Duplicate (B0E0052-DUP1)		**Source: 1005011-02**								
% Solids	84		1	%		84			0	20
Batch B0E0074 - -Water Extract Inorg - Anions									**Prepared & Analyzed: 05/20/10**	
									Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control	
Blank (B0E0074-BLK1)										
Sulfate	ND	U	5	mg/kg wet						
LCS (B0E0074-BS1)										
Sulfate	102		5	mg/kg wet	101		101	90-110		
Duplicate (B0E0074-DUP1)		**Source: 1005011-02**								
Sulfate	126,000		6,000	mg/kg dry		125,000			1	20
Matrix Spike (B0E0074-MS1)		**Source: 1005021-10**								
Sulfate	115		5.7	mg/kg dry	114	ND	100	80-120		
Matrix Spike Dup (B0E0074-MSD1)		**Source: 1005021-10**								
Sulfate	115		5.7	mg/kg dry	115	ND	100	80-120	0.6	20

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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**		**SDG:**	10131B
Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	06/01/10 14:59
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

Qualifiers and Comments

J	The reported result for this analyte should be considered an estimated value.
C1	The reported concentration for this analyte is below the quantitation limit.
U	Not Detected
NR	Not Reported
RE1, RE2, etc:	Result is from a sample re-analysis.

United States Environmental Protection Agency
Region 9 Laboratory

1337 S. 46th Street Building 201
Richmond, CA 94804

Subject: **Analytical Testing Results - Project R10S74**
SDG: 10131B

From: **Brenda Bettencourt, Director**
EPA Region 9 Laboratory
MTS-2

To: **Leah Butler**
Arizona and Navajo Site Section
SFD-6-2

Attached are the results from the analysis of samples from the **Iron King Mine May 2010 Field Investigation** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: Doug McReynolds, EA Enginnering

Analyses included in this report:

TCLP Metals by ICP	TCLP Mercury

United States Environmental Protection Agency
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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**		**SDG:**	10131B
Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	06/02/10 12:06
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
TCLP-12-0-0_5	1005011-01	Soil	05/08/10 08:16	05/11/10 11:30
TCLP-2-0-0_5	1005011-02	Soil	05/08/10 08:16	05/11/10 11:30
TCLP-3-0-0_5	1005011-03	Soil	05/08/10 09:45	05/11/10 11:30
TCLP-4-0-0_5	1005011-04	Soil	05/08/10 09:58	05/11/10 11:30
TCLP-5-0-0_5	1005011-05	Soil	05/08/10 10:24	05/11/10 11:30
TCLP-6-0-0_5	1005011-06	Soil	05/08/10 10:34	05/11/10 11:30
TCLP-7-0-0_5	1005011-07	Soil	05/08/10 10:54	05/11/10 11:30
TCLP-8-0-0_5	1005011-08	Soil	05/08/10 11:56	05/11/10 11:30
TCLP-1-0-0_5	1005011-09	Soil	05/03/10 13:40	05/11/10 11:30
TCLP-11-0-0_5	1005011-10	Soil	05/03/10 13:40	05/11/10 11:30

SDG ID 10131B

Work Order(s)

1005011

United States Environmental Protection Agency
Region 9 Laboratory
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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10131B
Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 06/02/10 12:06
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID:	**1005011-01**								**Soil - Sampled: 05/08/10 08:16**
Sample ID:	**TCLP-12-0-0_5**								**Metals by EPA 6000/7000 Series Methods**
Arsenic		6.1		0.20	mg/L	B0E0068	05/20/10	05/21/10	6010B/SOP503
Barium		ND	U	0.50	"	"	"	"	6010B/SOP503
Cadmium		0.35		0.050	"	"	"	"	6010B/SOP503
Chromium		0.076	C1, J	0.10	"	"	"	"	6010B/SOP503
Lead		ND	U	0.30	"	"	"	"	6010B/SOP503
Selenium		ND	U	0.20	"	"	"	"	6010B/SOP503
Silver		ND	U	0.10	"	"	"	"	6010B/SOP503
Sample ID:	**TCLP-12-0-0_5**								**Metals by EPA 200 Series Methods**
Mercury		0.00092		0.00030	"	B0E0085	05/24/10	05/25/10	245.1/SOP515
Lab ID:	**1005011-02**								**Soil - Sampled: 05/08/10 08:16**
Sample ID:	**TCLP-2-0-0_5**								**Metals by EPA 6000/7000 Series Methods**
Arsenic		7.2		0.20	mg/L	B0E0068	05/20/10	05/21/10	6010B/SOP503
Barium		ND	U	0.50	"	"	"	"	6010B/SOP503
Cadmium		0.37		0.050	"	"	"	"	6010B/SOP503
Chromium		0.086	C1, J	0.10	"	"	"	"	6010B/SOP503
Lead		ND	U	0.30	"	"	"	"	6010B/SOP503
Selenium		ND	U	0.20	"	"	"	"	6010B/SOP503
Silver		ND	U	0.10	"	"	"	"	6010B/SOP503
Sample ID:	**TCLP-2-0-0_5**								**Metals by EPA 200 Series Methods**
Mercury		0.00073		0.00030	"	B0E0085	05/24/10	05/25/10	245.1/SOP515
Lab ID:	**1005011-03**								**Soil - Sampled: 05/08/10 09:45**
Sample ID:	**TCLP-3-0-0_5**								**Metals by EPA 6000/7000 Series Methods**
Arsenic		ND	U	0.20	mg/L	B0E0068	05/20/10	05/21/10	6010B/SOP503
Barium		0.86		0.50	"	"	"	"	6010B/SOP503
Cadmium		0.054		0.050	"	"	"	"	6010B/SOP503
Chromium		0.052	C1, J	0.10	"	"	"	"	6010B/SOP503
Lead		2.6		0.30	"	"	"	"	6010B/SOP503
Selenium		ND	U	0.20	"	"	"	"	6010B/SOP503
Silver		ND	U	0.10	"	"	"	"	6010B/SOP503
Sample ID:	**TCLP-3-0-0_5**								**Metals by EPA 200 Series Methods**
Mercury		ND	U	0.00030	"	B0E0085	05/24/10	05/25/10	245.1/SOP515
Lab ID:	**1005011-04**								**Soil - Sampled: 05/08/10 09:58**
Sample ID:	**TCLP-4-0-0_5**								**Metals by EPA 6000/7000 Series Methods**
Arsenic		ND	U	0.20	mg/L	B0E0068	05/20/10	05/21/10	6010B/SOP503
Barium		ND	U	0.50	"	"	"	"	6010B/SOP503
Cadmium		ND	U	0.050	"	"	"	"	6010B/SOP503
Chromium		ND	U	0.10	"	"	"	"	6010B/SOP503
Lead		0.18	C1, J	0.30	"	"	"	"	6010B/SOP503

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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10131B
Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 06/02/10 12:06
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID:	**1005011-04**								**Soil - Sampled: 05/08/10 09:58**
Sample ID:	**TCLP-4-0-0_5**								**Metals by EPA 6000/7000 Series Methods**
Selenium		ND	U	0.20	mg/L	B0E0068	05/20/10	05/21/10	6010B/SOP503
Silver		ND	U	0.10	"	"	"	"	6010B/SOP503
Sample ID:	**TCLP-4-0-0_5**								**Metals by EPA 200 Series Methods**
Mercury		ND	U	0.00030	"	B0E0085	05/24/10	05/25/10	245.1/SOP515
Lab ID:	**1005011-05**								**Soil - Sampled: 05/08/10 10:24**
Sample ID:	**TCLP-5-0-0_5**								**Metals by EPA 6000/7000 Series Methods**
Arsenic		ND	U	0.20	mg/L	B0E0068	05/20/10	05/21/10	6010B/SOP503
Barium		ND	U	0.50	"	"	"	"	6010B/SOP503
Cadmium		ND	U	0.050	"	"	"	"	6010B/SOP503
Chromium		ND	U	0.10	"	"	"	"	6010B/SOP503
Lead		ND	U	0.30	"	"	"	"	6010B/SOP503
Selenium		ND	U	0.20	"	"	"	"	6010B/SOP503
Silver		ND	U	0.10	"	"	"	"	6010B/SOP503
Sample ID:	**TCLP-5-0-0_5**								**Metals by EPA 200 Series Methods**
Mercury		0.00017	C1, J	0.00030	"	B0E0085	05/24/10	05/25/10	245.1/SOP515
Lab ID:	**1005011-06**								**Soil - Sampled: 05/08/10 10:34**
Sample ID:	**TCLP-6-0-0_5**								**Metals by EPA 6000/7000 Series Methods**
Arsenic		ND	U	0.20	mg/L	B0E0068	05/20/10	05/21/10	6010B/SOP503
Barium		ND	U	0.50	"	"	"	"	6010B/SOP503
Cadmium		ND	U	0.050	"	"	"	"	6010B/SOP503
Chromium		ND	U	0.10	"	"	"	"	6010B/SOP503
Lead		ND	U	0.30	"	"	"	"	6010B/SOP503
Selenium		ND	U	0.20	"	"	"	"	6010B/SOP503
Silver		ND	U	0.10	"	"	"	"	6010B/SOP503
Sample ID:	**TCLP-6-0-0_5**								**Metals by EPA 200 Series Methods**
Mercury		ND	U	0.00030	"	B0E0085	05/24/10	05/25/10	245.1/SOP515
Lab ID:	**1005011-07**								**Soil - Sampled: 05/08/10 10:54**
Sample ID:	**TCLP-7-0-0_5**								**Metals by EPA 6000/7000 Series Methods**
Arsenic		ND	U	0.20	mg/L	B0E0068	05/20/10	05/21/10	6010B/SOP503
Barium		0.30	C1, J	0.50	"	"	"	"	6010B/SOP503
Cadmium		0.067		0.050	"	"	"	"	6010B/SOP503
Chromium		ND	U	0.10	"	"	"	"	6010B/SOP503
Lead		ND	U	0.30	"	"	"	"	6010B/SOP503
Selenium		ND	U	0.20	"	"	"	"	6010B/SOP503
Silver		ND	U	0.10	"	"	"	"	6010B/SOP503
Sample ID:	**TCLP-7-0-0_5**								**Metals by EPA 200 Series Methods**
Mercury		ND	U	0.00030	"	B0E0085	05/24/10	05/25/10	245.1/SOP515

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager:	Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10131B
Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 06/02/10 12:06
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID:	**1005011-08**								**Soil - Sampled: 05/08/10 11:56**
Sample ID:	**TCLP-8-0-0_5**								**Metals by EPA 6000/7000 Series Methods**
Arsenic		ND	U	0.20	mg/L	B0E0068	05/20/10	05/21/10	6010B/SOP503
Barium		ND	U	0.50	"	"	"	"	6010B/SOP503
Cadmium		0.12		0.050	"	"	"	"	6010B/SOP503
Chromium		ND	U	0.10	"	"	"	"	6010B/SOP503
Lead		ND	U	0.30	"	"	"	"	6010B/SOP503
Selenium		ND	U	0.20	"	"	"	"	6010B/SOP503
Silver		ND	U	0.10	"	"	"	"	6010B/SOP503
Sample ID:	**TCLP-8-0-0_5**								**Metals by EPA 200 Series Methods**
Mercury		0.00020	C1, J	0.00030	"	B0E0085	05/24/10	05/25/10	245.1/SOP515
Lab ID:	**1005011-09**								**Soil - Sampled: 05/03/10 13:40**
Sample ID:	**TCLP-1-0-0_5**								**Metals by EPA 6000/7000 Series Methods**
Arsenic		ND	U	0.20	mg/L	B0E0068	05/20/10	05/21/10	6010B/SOP503
Barium		ND	U	0.50	"	"	"	"	6010B/SOP503
Cadmium		ND	U	0.050	"	"	"	"	6010B/SOP503
Chromium		ND	U	0.10	"	"	"	"	6010B/SOP503
Lead		ND	U	0.30	"	"	"	"	6010B/SOP503
Selenium		ND	U	0.20	"	"	"	"	6010B/SOP503
Silver		ND	U	0.10	"	"	"	"	6010B/SOP503
Sample ID:	**TCLP-1-0-0_5**								**Metals by EPA 200 Series Methods**
Mercury		0.00070		0.00030	"	B0E0085	05/24/10	05/25/10	245.1/SOP515
Lab ID:	**1005011-10**								**Soil - Sampled: 05/03/10 13:40**
Sample ID:	**TCLP-11-0-0_5**								**Metals by EPA 6000/7000 Series Methods**
Arsenic		ND	U	0.20	mg/L	B0E0068	05/20/10	05/21/10	6010B/SOP503
Barium		ND	U	0.50	"	"	"	"	6010B/SOP503
Cadmium		ND	U	0.050	"	"	"	"	6010B/SOP503
Chromium		ND	U	0.10	"	"	"	"	6010B/SOP503
Lead		ND	U	0.30	"	"	"	"	6010B/SOP503
Selenium		ND	U	0.20	"	"	"	"	6010B/SOP503
Silver		ND	U	0.10	"	"	"	"	6010B/SOP503
Sample ID:	**TCLP-11-0-0_5**								**Metals by EPA 200 Series Methods**
Mercury		0.00020	C1, J	0.00030	"	B0E0085	05/24/10	05/25/10	245.1/SOP515

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Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 06/02/10 12:06
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B0E0068 - Leachate Digest - Metals, TCLP, ICP										**Prepared: 05/20/10 Analyzed: 05/21/10**
										Metals by EPA 6000/7000 Series Methods - Quality Control
Blank (B0E0068-BLK1)										
Arsenic	ND	U	0.2	mg/L						
Barium	ND	U	0.5	"						
Cadmium	ND	U	0.05	"						
Chromium	ND	U	0.1	"						
Lead	ND	U	0.3	"						
Selenium	ND	U	0.2	"						
Silver	ND	U	0.1	"						
LCS (B0E0068-BS1)										
Arsenic	21.5		0.2	mg/L	20.0		107	80-120		200
Barium	19.9		0.5	"	20.0		99	80-120		200
Cadmium	0.511		0.05	"	0.500		102	80-120		200
Chromium	2.03		0.1	"	2.00		101	80-120		200
Lead	5		0.3	"	5.00		100	80-120		200
Selenium	20.5		0.2	"	20.0		102	80-120		200
Silver	0.486		0.1	"	0.500		97	80-120		200
Duplicate (B0E0068-DUP1)		**Source: 1005011-02**								
Arsenic	7.6		0.2	mg/L		7.21			5	20
Barium	ND	U	0.5	"		ND				20
Cadmium	0.377		0.05	"		0.372			1	20
Chromium	0.082	C1, J	0.1	"		0.086			5	20
Lead	ND	U	0.3	"		ND				20
Selenium	ND	U	0.2	"		ND				20
Silver	ND	U	0.1	"		ND				20
Duplicate (B0E0068-DUP2)		**Source: 1005011-09**								
Arsenic	ND	U	0.2	mg/L		ND				20
Barium	ND	U	0.5	"		ND				20
Cadmium	ND	U	0.05	"		ND				20
Chromium	ND	U	0.1	"		ND				20
Lead	ND	U	0.3	"		ND				20
Selenium	ND	U	0.2	"		ND				20
Silver	ND	U	0.1	"		ND				20
Matrix Spike (B0E0068-MS1)		**Source: 1005011-02**								
Arsenic	28.9		0.2	mg/L	20.0	7.21	108	75-125		20
Barium	19.8		0.5	"	20.0	ND	99	75-125		20
Cadmium	0.869		0.05	"	0.500	0.372	99	75-125		20
Chromium	2.04		0.1	"	2.00	0.086	97	75-125		20
Lead	4.8		0.3	"	5.00	ND	96	75-125		20
Selenium	20		0.2	"	20.0	ND	100	75-125		20
Silver	0.475		0.1	"	0.500	ND	95	75-125		20
Matrix Spike (B0E0068-MS2)		**Source: 1005011-09**								
Arsenic	22.4		0.2	mg/L	20.0	ND	112	75-125		20

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Project Number: R10S74	**75 Hawthorne Street**	**Reported:** 06/02/10 12:06
Project: Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B0E0068 - Leachate Digest - Metals, TCLP, ICP									**Prepared: 05/20/10 Analyzed: 05/21/10**	
									Metals by EPA 6000/7000 Series Methods - Quality Control	
Matrix Spike (B0E0068-MS2)		**Source: 1005011-09**								
Barium	20.1		0.5	"	20.0	ND	101	75-125		20
Cadmium	0.507		0.05	"	0.500	ND	101	75-125		20
Chromium	2.05		0.1	"	2.00	ND	102	75-125		20
Lead	4.91		0.3	"	5.00	ND	98	75-125		20
Selenium	20.1		0.2	"	20.0	ND	101	75-125		20
Silver	0.479		0.1	"	0.500	ND	96	75-125		20
Matrix Spike Dup (B0E0068-MSD1)		**Source: 1005011-02**								
Arsenic	28.9		0.2	mg/L	20.0	7.21	108	75-125	0.06	20
Barium	20.6		0.5	"	20.0	ND	103	75-125	4	20
Cadmium	0.87		0.05	"	0.500	0.372	100	75-125	0.2	20
Chromium	2.05		0.1	"	2.00	0.086	98	75-125	0.7	20
Lead	4.85		0.3	"	5.00	ND	97	75-125	1	20
Selenium	20.2		0.2	"	20.0	ND	101	75-125	0.7	20
Silver	0.476		0.1	"	0.500	ND	95	75-125	0.3	20
Matrix Spike Dup (B0E0068-MSD2)		**Source: 1005011-09**								
Arsenic	22.4		0.2	mg/L	20.0	ND	112	75-125	0.2	20
Barium	20		0.5	"	20.0	ND	100	75-125	0.8	20
Cadmium	0.506		0.05	"	0.500	ND	101	75-125	0.2	20
Chromium	2.06		0.1	"	2.00	ND	103	75-125	0.5	20
Lead	4.92		0.3	"	5.00	ND	98	75-125	0.2	20
Selenium	20.3		0.2	"	20.0	ND	102	75-125	1	20
Silver	0.481		0.1	"	0.500	ND	96	75-125	0.6	20
Batch B0E0085 - Leachate Digest - Metals, TCLP, Mercury									**Prepared: 05/24/10 Analyzed: 05/25/10**	
									Metals by EPA 200 Series Methods - Quality Control	
Blank (B0E0085-BLK1)										
Mercury	ND	U	0.0003	mg/L						
LCS (B0E0085-BS1)										
Mercury	0.0022		0.0003	mg/L	0.0020(		110	85-115		200
Duplicate (B0E0085-DUP1)		**Source: 1005011-02**								
Mercury	0.000742		0.0003	mg/L		0.000727			2	20
Duplicate (B0E0085-DUP2)		**Source: 1005011-09**								
Mercury	0.000724		0.0003	mg/L		0.000695			4	20
Matrix Spike (B0E0085-MS1)		**Source: 1005011-02**								
Mercury	0.00303		0.0003	mg/L	0.0020(	0.000727	115	70-130		20
Matrix Spike (B0E0085-MS2)		**Source: 1005011-09**								
Mercury	0.0029		0.0003	mg/L	0.0020(	0.000695	110	70-130		20
Matrix Spike Dup (B0E0085-MSD1)		**Source: 1005011-02**								
Mercury	0.00293		0.0003	mg/L	0.0020(	0.000727	110	70-130	3	20
Matrix Spike Dup (B0E0085-MSD2)		**Source: 1005011-09**								
Mercury	0.00285		0.0003	mg/L	0.0020(	0.000695	108	70-130	2	20

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Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	06/02/10 12:06
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

Qualifiers and Comments

J	The reported result for this analyte should be considered an estimated value.
C1	The reported concentration for this analyte is below the quantitation limit.
U	Not Detected
NR	Not Reported
RE1, RE2, etc:	Result is from a sample re-analysis.

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Region 9 Laboratory

1337 S. 46th Street Building 201
Richmond, CA 94804

Subject: **Analytical Testing Results - Project R10S74**
SDG: 10134B

From: **Brenda Bettencourt, Director**
EPA Region 9 Laboratory
MTS-2

To: **Leah Butler**
Arizona and Navajo Site Section
SFD-6-2

Attached are the results from the analysis of samples from the **Iron King Mine May 2010 Field Investigation** project. These data have been reviewed in accordance with EPA Region 9 Laboratory policy.

A full documentation package for these data, including raw data and sample custody documentation, is on file at the EPA Region 9 Laboratory. If you would like to request additional review and/or validation of the data, please contact Eugenia McNaughton at the Region 9 Quality Assurance Office.

If you have any questions, please ask for Richard Bauer, the Lab Project Manager at (510)412-2300.

Electronic CC: Doug McReynolds, EA Engineering

Analyses included in this report:

Anions by Ion Chromatography	Total Kjeldahl Nitrogen

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Project Manager:	Leah Butler	**Arizona and Navajo Site Section**		**SDG:**	10134B
Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	06/21/10 13:07
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Collected	Date Received
GW-999902	1005024-01	Water	05/11/10 08:40	05/14/10 10:40
GW-999913	1005024-02	Water	05/13/10 09:22	05/14/10 10:40
GW-999914	1005024-03	Water	05/13/10 08:36	05/14/10 10:40
GW-999955	1005024-04	Water	05/11/10 09:43	05/14/10 10:40
GW-999963	1005024-05	Water	05/12/10 10:20	05/14/10 10:40
GW-999964	1005024-06	Water	05/12/10 10:36	05/14/10 10:40
GW-999965	1005024-07	Water	05/13/10 11:45	05/14/10 10:40
GW-999966	1005024-08	Water	05/13/10 15:45	05/14/10 10:40
GW-9999963	1005024-09	Water	05/12/10 10:20	05/14/10 10:40

SDG ID 10134B

Work Order(s)

1005024

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Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 06/21/10 13:07
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1005024-01									**Water - Sampled: 05/11/10 08:40**
Sample ID: GW-999902									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		0.24		0.10	mg/L	B0F0016	06/03/10	06/04/10	300.0/SOP 530
Chloride		25		1	"	"	"	"	300.0/SOP 530
Bromide		0.18		0.10	"	"	"	"	300.0/SOP 530
Sulfate	RE1	97		2.5	"	B0F0025	06/05/10	06/05/10	300.0/SOP 530
Lab ID: 1005024-02									**Water - Sampled: 05/13/10 09:22**
Sample ID: GW-999913									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		0.26		0.10	mg/L	B0F0016	06/03/10	06/04/10	300.0/SOP 530
Chloride		36		1	"	"	"	"	300.0/SOP 530
Bromide		0.24		0.10	"	"	"	"	300.0/SOP 530
Sulfate		40		0.50	"	"	"	"	300.0/SOP 530
Lab ID: 1005024-03									**Water - Sampled: 05/13/10 08:36**
Sample ID: GW-999914									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		0.25		0.10	mg/L	B0F0016	06/03/10	06/04/10	300.0/SOP 530
Chloride		42		1	"	"	"	"	300.0/SOP 530
Bromide		0.27		0.10	"	"	"	"	300.0/SOP 530
Sulfate		44		0.50	"	"	"	"	300.0/SOP 530
Lab ID: 1005024-04									**Water - Sampled: 05/11/10 09:43**
Sample ID: GW-999955									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		0.19		0.10	mg/L	B0F0016	06/03/10	06/04/10	300.0/SOP 530
Chloride		41		1	"	"	"	"	300.0/SOP 530
Bromide		0.39		0.10	"	"	"	"	300.0/SOP 530
Sulfate		45		0.50	"	"	"	"	300.0/SOP 530
Lab ID: 1005024-05									**Water - Sampled: 05/12/10 10:20**
Sample ID: GW-999963									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		0.13		0.10	mg/L	B0F0016	06/03/10	06/04/10	300.0/SOP 530
Chloride		43		1	"	"	"	"	300.0/SOP 530
Bromide		0.18		0.10	"	"	"	"	300.0/SOP 530
Sulfate	RE1	56		1	"	B0F0025	06/05/10	06/05/10	300.0/SOP 530
Lab ID: 1005024-06									**Water - Sampled: 05/12/10 10:36**
Sample ID: GW-999964									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		0.27		0.10	mg/L	B0F0016	06/03/10	06/04/10	300.0/SOP 530
Chloride		8.8		1	"	"	"	"	300.0/SOP 530
Bromide		0.09	J, C1	0.10	"	"	"	"	300.0/SOP 530
Sulfate		47		0.50	"	"	"	"	300.0/SOP 530
Lab ID: 1005024-07									**Water - Sampled: 05/13/10 11:45**
Sample ID: GW-999965									**Conventional Chemistry Parameters by APHA/EPA Methods**
Fluoride		0.38		0.10	mg/L	B0F0016	06/03/10	06/04/10	300.0/SOP 530
Chloride		33		1	"	"	"	"	300.0/SOP 530
Bromide		0.19		0.10	"	"	"	"	300.0/SOP 530
Sulfate	RE1	61		1	"	B0F0025	06/05/10	06/05/10	300.0/SOP 530

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Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Sample Results

Analyte	Reanalysis / Extract	Result	Qualifiers / Comments	Quantitation Limit	Units	Batch	Prepared	Analyzed	Method
Lab ID: 1005024-07									**Water - Sampled: 05/13/10 11:45**
Sample ID: GW-999965						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Nitrogen, Total Kjeldahl		ND	U	0.10	mg/L	B0E0093	05/24/10	05/25/10	351.2/SOP592
Lab ID: 1005024-08									**Water - Sampled: 05/13/10 15:45**
Sample ID: GW-999966						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Fluoride		0.21		0.10	mg/L	B0F0016	06/03/10	06/04/10	300.0/SOP 530
Chloride	RE2	340		10	"	B0F0049	06/05/10	06/10/10	300.0/SOP 530
Bromide		1.4		0.10	"	B0F0016	06/03/10	06/04/10	300.0/SOP 530
Sulfate	RE1	150		2.5	"	B0F0025	06/05/10	06/05/10	300.0/SOP 530
Lab ID: 1005024-09									**Water - Sampled: 05/12/10 10:20**
Sample ID: GW-9999963						**Conventional Chemistry Parameters by APHA/EPA Methods**			
Fluoride		0.11		0.10	mg/L	B0F0016	06/03/10	06/04/10	300.0/SOP 530
Chloride		43		1	"	"	"	"	300.0/SOP 530
Bromide		0.22		0.10	"	"	"	"	300.0/SOP 530
Sulfate	RE1	57		1	"	B0F0025	06/05/10	06/05/10	300.0/SOP 530

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Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B0E0093 - 351.2/365.1 TKN/T-P - Nitrogen, Total Kjeldahl									**Prepared: 05/24/10 Analyzed: 05/25/10**	
								Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control		
Blank (B0E0093-BLK1)										
Nitrogen, Total Kjeldahl	ND	U	0.1	mg/L						
LCS (B0E0093-BS1)										
Nitrogen, Total Kjeldahl	0.99		0.1	mg/L	1.00		99	90-110		
Matrix Spike (B0E0093-MS4)		**Source: 1005024-07**								
Nitrogen, Total Kjeldahl	1.92		0.1	mg/L	2.00	ND	96	90-110		
Matrix Spike Dup (B0E0093-MSD4)		**Source: 1005024-07**								
Nitrogen, Total Kjeldahl	1.87		0.1	mg/L	2.00	ND	94	90-110	3	20
Batch B0F0016 - - General Inorganic - Anions									**Prepared & Analyzed: 06/03/10**	
								Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control		
Blank (B0F0016-BLK1)										
Fluoride	ND	U	0.1	mg/L						
Chloride	ND	U	1	"						
Bromide	ND	U	0.1	"						
Sulfate	ND	U	0.5	"						
Blank (B0F0016-BLK2)										
Fluoride	ND	U	0.1	mg/L						
Chloride	ND	U	1	"						
Bromide	ND	U	0.1	"						
Sulfate	ND	U	0.5	"						
LCS (B0F0016-BS1)										
Fluoride	4.77		0.1	mg/L	5.00		95	90-110		
Chloride	9.69		1	"	10.1		96	90-110		
Nitrite as N	4.74		0.1	"	4.99		95	90-110		
Bromide	4.97		0.1	"	5.00		99	90-110		
Nitrate as N	4.97		0.1	"	5.00		99	90-110		
Sulfate	9.95		0.5	"	10.1		99	90-110		
LCS (B0F0016-BS2)										
Fluoride	4.92		0.1	mg/L	5.00		98	90-110		
Chloride	9.81		1	"	10.1		97	90-110		
Nitrite as N	4.84		0.1	"	4.99		97	90-110		
Bromide	5.08		0.1	"	5.00		102	90-110		
Nitrate as N	5.05		0.1	"	5.00		101	90-110		
Sulfate	9.99		0.5	"	10.1		99	90-110		
Duplicate (B0F0016-DUP3)		**Source: 1005024-04**								
Chloride	40.2		1	mg/L		40.9			2	20
Sulfate	44.2		0.5	"		45.1			2	20
Duplicate (B0F0016-DUP4)		**Source: 1005024-06**								
Sulfate	46.6		0.5	mg/L		47.4			2	20
Matrix Spike (B0F0016-MS5)		**Source: 1005024-04**								
Fluoride	5.59		0.11	mg/L	5.49	0.19	98	80-120		

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager:	Leah Butler	**Arizona and Navajo Site Section**	**SDG:** 10134B
Project Number:	R10S74	**75 Hawthorne Street**	**Reported:** 06/21/10 13:07
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**	

Quality Control

Analyte	Result	Qualifiers / Comments	Quantitation Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Batch B0F0016 - - General Inorganic - Anions										**Prepared: 06/03/10 Analyzed: 06/04/10**
										Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control
Matrix Spike (B0F0016-MS5)		**Source: 1005024-04**								
Bromide	5.92		0.11	"	5.49	0.387	101	80-120		
Matrix Spike (B0F0016-MS6)		**Source: 1005024-06**								
Fluoride	5.51		0.11	mg/L	5.49	0.269	95	80-120		
Chloride	19.4		1.1	"	11.1	8.82	95	80-120		
Bromide	5.46		0.11	"	5.49	0.088	98	80-120		
Matrix Spike Dup (B0F0016-MSD5)		**Source: 1005024-04**								
Fluoride	5.5		0.11	mg/L	5.49	0.19	97	80-120	2	20
Bromide	5.84		0.11	"	5.49	0.387	99	80-120	1	20
Matrix Spike Dup (B0F0016-MSD6)		**Source: 1005024-06**								
Fluoride	5.48		0.11	mg/L	5.49	0.269	95	80-120	0.6	20
Chloride	19.5		1.1	"	11.1	8.82	96	80-120	0.5	20
Bromide	5.41		0.11	"	5.49	0.088	97	80-120	0.8	20
Batch B0F0025 - - General Inorganic - Anions										**Prepared & Analyzed: 06/05/10**
										Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control
Blank (B0F0025-BLK1)										
Fluoride	ND	U	0.1	mg/L						
Chloride	ND	U	1	"						
Bromide	ND	U	0.1	"						
Sulfate	ND	U	0.5	"						
LCS (B0F0025-BS1)										
Fluoride	4.73			mg/L	5.00		95	90-110		
Chloride	9.63			"	10.1		95	90-110		
Nitrite as N	4.69			"	4.99		94	90-110		
Bromide	4.97			"	5.00		99	90-110		
Nitrate as N	4.95			"	5.00		99	90-110		
Sulfate	9.83			"	10.1		97	90-110		
Batch B0F0049 - - General Inorganic - Anions										**Prepared & Analyzed: 06/10/10**
										Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control
Blank (B0F0049-BLK1)										
Chloride	ND	U	1	mg/L						
LCS (B0F0049-BS1)										
Chloride	9.68			mg/L	10.1		96	90-110		200

United States Environmental Protection Agency
Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804
Phone:(510) 412-2300 Fax:(510) 412-2302

Project Manager:	Leah Butler	**Arizona and Navajo Site Section**		**SDG:**	10134B
Project Number:	R10S74	**75 Hawthorne Street**		**Reported:**	06/21/10 13:07
Project:	Iron King Mine May 2010 Field Investigation	**San Francisco CA, 94105**			

Qualifiers and Comments

J	The reported result for this analyte should be considered an estimated value.
C1	The reported concentration for this analyte is below the quantitation limit.
U	Not Detected
NR	Not Reported
RE1, RE2, etc:	Result is from a sample re-analysis.

Appendix C

Data Validation Reports for EPA Contract Laboratories

(Electronic on CD)

ICF International / Laboratory Data Consultants
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

MEMORANDUM

TO: Monika O'Sullivan, Remedial Project Manager
Arizona and Navajo Site Section, SFD-6-2

THROUGH: Rose Fong, ESAT Task Order Manager (TOM)
Quality Assurance (QA) Program, MTS-3

FROM: Kathleen O'Brien, Data Review Task Manager
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00705009 Amendment 1

DATE: September 1, 2010

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Iron King Mine
Site Account No.:	09 MX QB00
CERCLIS ID No.:	AZ0000309013
Case No.:	40016
SDG No.:	MY6AA8
Laboratory:	Bonner Analytical Testing Company (BONNER)
Analysis:	CLP Total Metals and Total Cyanide
Samples:	20 Soils (see Case Summary)
Collection Date:	May 11, 2010
Reviewer:	Laurie Smith, ESAT/Laboratory Data Consultants (LDC)

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Cynthia Gurley, CLP PO USEPA Region 4
Steve Remaley, CLP PO USEPA Region 9

CLP PO: [X] FYI [ ] Action

SAMPLING ISSUES: [ ] Yes [X] No

Data Validation Report – Tier 3

Case No.: 40016
SDG No.: MY6AD9
Site: Iron King Mine
Laboratory: Bonner Analytical Testing Company (BONNER)
Reviewer: Laurie Smith, ESAT/LDC
Date: September 1, 2010

I. CASE SUMMARY

Sample Information

Samples: MY6AA8, MY6AA9, MY6AC1, MY6AC2, MY6AC3, MY6AC4, MY6AC5, MY6AC6, MY6AC7, MY6AC8, MY6AC9, MY6AD0, MY6AD1, MY6AD2, MY6AD3, MY6AD4, MY6AD5, MY6AD6, MY6AD7, and MY6AD8

Concentration and Matrix: Low Concentration Soil
Analysis: CLP Total Metals and Total Cyanide
SOW: ILM05.4
Collection Date: May 11, 2010
Sample Receipt Date: May 13, 2010
Preparation Date: May 14 and 17, 2010
Analysis Date: May 15, 17, and 18, 2010

Field QC

Field Blanks (FB): Not Provided
Equipment Blanks (EB): Not Provided
Background Samples (BG): Not Provided
Field Duplicates (D1): MY6AC1 and MY6AC2
Field Duplicates (D2): MY6AD2 and MY6AD3

Laboratory QC

Method Blank & Associated Samples: Preparation Blank-Soil (PBS) and samples listed above
Matrix Spike: MY6AC1S
Duplicates: MY6AC1D
ICP Serial Dilution: MY6AC1L

Analysis: CLP Total Metals and Total Cyanide

Analyte	Sample Preparation and Digestion Date	Analysis Date
ICP-AES Metals	May 14, 2010	May 17 and 18, 2010
Mercury	May 17, 2010	May 18, 2010
Cyanide	May 17, 2010	May 17, 2010
Percent Solids	May 14, 2010	May 15, 2010

CLP PO Action

None.

Sampling Issues

None.

Additional Comments

The following samples were diluted and re-analyzed due to high analyte concentrations that exceed the instrument's linear range.

Sample	Dilution	Analyte
MY6AC3	5-fold	Lead

All method requirements specified in the EPA Contract Laboratory Program (CLP) Inorganic Statement of Work (SOW), except as noted, have been met.

Analytical results are listed in Table 1A with qualifications. Definitions of data qualifiers used in Table 1A are provided in Table 1B.

This report was prepared in accordance with the following documents:

- Region 9 Standard Operating Procedure 906, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Inorganic Data Packages*;
- *USEPA Contract Laboratory Program Statement of Work For Inorganic Analysis Multi-Media, Multi-Concentration* ILM05.3, March 2004;
- *ILM05.3 to ILM05.4 Summary of Changes*, December 1, 2006; and
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	Parameter	Acceptable	Comment
1.	Data Completeness	Yes	
2.	Sample Preservation and Holding Times	Yes	
3.	Calibration	Yes	
	a. Initial		
	b. Initial and Continuing Calibration Verification		
	c. CRQL Check Standard (CRI)		
4.	Blanks	Yes	B
5.	ICP Interference Check Sample (ICS)	No	C
6.	Laboratory Control Sample (LCS)	Yes	
7.	Duplicate Sample Analysis	Yes	
8.	Matrix Spike Sample Analysis	No	D
9.	ICP Serial Dilution Analysis	No	E
10.	Field Duplicate Sample Analysis	No	F
11.	Sample Quantitation	Yes	A
12.	Overall Assessment	Yes	

III. VALIDITY AND COMMENTS

A. Results above the method detection limit but below the contract required quantitation limit (denoted with an "L" qualifier) are estimated and flagged "J" in Table 1A.

Results above the method detection limit (MDL) but below the contract required quantitation limit (CRQL) are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of quantitation.

B. The following results are reported as non-detected (U) in Table 1A due to low level preparation blank (PBW) or continuing calibration blank (CCB) contamination.

- Antimony in samples MY6AD2, MY6AD3, and MY6AD4
- Selenium in samples MY6AA8 through MY6AD1

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Antimony	CCB4	0.29
Selenium	PBW	0.50

Sample results less than 5 times the amount in an associated blank that are greater than or equal to the MDL but less than the CRQL are reported as non-detected (U) at the respective CRQL.

A preparation blank is an analytical control that contains distilled, deionized water, or baked sand for solid matrices, and reagents, which is carried through the entire

analytical procedure. The preparation blank is used to determine the level of contamination introduced by the laboratory during preparation and analysis.

A continuing calibration blank (CCB) consists of deionized, distilled water and reagents. It is analyzed after the continuing calibration verification (CCV) standard, at a frequency of every 10 samples and at the end of the analytical run to monitor analyte carry-over.

C. The following results are estimated and flagged "J" or "UJ" in Table 1A because sample concentrations of iron exceed the concentrations in the interelement check sample (ICS).

- Silver in all samples except MY6AC1 and MY6AC7

Results for the analyte listed above were reported from undiluted analyses that contained iron at concentrations that exceed 120% of the ICSAB solution concentration. Therefore, the instrument applied interelement correction (IEC) factors may not compensate sufficiently for the interference. The results for silver may be biased low and false negatives may exist.

The ICP ICS solutions A and AB are analyzed to determine the effects of high concentrations of interfering elements on each analyte determined by ICP. Solution A consists of the interferents (Al, Ca, Fe, and Mg), and Solution AB consists of the analytes mixed with the interferents.

D. The following results are estimated and flagged "J", "J-", or "UJ" in Table 1A because matrix spike recovery results are outside method QC limits.

- Antimony, arsenic, and mercury in all samples

The matrix spike recovery results for QC sample MY6AC1S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	11	-89
Arsenic	149	+49
Mercury	74	-36

Results above the MDL are considered quantitatively uncertain. Results reported for antimony and mercury in all samples may be biased low. However, results for arsenic may be biased high.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY6AC1A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	100
Arsenic	125

Since the post-digestion spike recovery results were acceptable, the unacceptable pre-digestion spike recovery results may indicate poor laboratory technique or matrix effects which may interfere with accurate analysis.

The matrix spike sample analysis provides information about the effect of the sample matrix on the digestion and measurement methodology.

E. The following results are estimated and flagged "J" in Table 1A because ICP serial dilution results are outside method QC limits.

- Copper and potassium in all samples

The percent difference for the ICP serial dilution analysis of sample MY6AC1L did not meet the ±10% difference criterion for the analytes shown below.

Analyte	% Difference
Copper	-12
Potassium	-18

Results reported for analytes listed above in all samples are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The results for the diluted sample were lower than the original. Therefore, the reported sample results may be biased high.

A five-fold dilution of the laboratory QC sample is performed in association with the ICP procedure to indicate whether interference exists due to sample matrix effects. If the analyte concentration is sufficiently high (minimally a factor of 50 above the MDL in the original sample), the five-fold serial dilution must agree within 10% of the original results after correction for dilution.

F. A comparison of field duplicate pair results indicates the following relative percent difference (RPD) exceeds the 35 RPD laboratory criterion for precision.

Analyte	MY6AC1 (D1) mg/kg	MY6AC2 (D1) mg/kg	RPD
Lead	46.7	70.9	41

Since sampling variability is included in the measurement, field duplicate results are expected to vary more than laboratory duplicates. The effect on data quality is not known.

The analysis of field duplicate samples is a measure of both field and analytical precision. The imprecision in the results of the analysis of the field duplicate pair may be due to the sample matrix, high levels of solids in the sample, poor sampling, or laboratory technique.

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

ICF International / Laboratory Data Consultants
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

MEMORANDUM

TO: Monika O'Sullivan, Remedial Project Manager
Arizona and Navajo Site Section, SFD-6-2

THROUGH: Rose Fong, ESAT Task Order Manager (TOM)
Quality Assurance (QA) Program, MTS-3

FROM: Kathleen O'Brien, Data Review Task Manager
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00705009 Amendment 1

DATE: August 30, 2010

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Iron King Mine
Site Account No.:	09 MX QB00
CERCLIS ID No.:	AZ0000309013
Case No.:	40016
SDG No.:	MY6728
Laboratory:	CompuChem-Liberty Analytical Corp. (LIBRTY)
Analysis:	CLP Total Metals and Total Cyanide
Samples:	20 Soils (see Case Summary)
Collection Date:	May 2, 2010
Reviewer:	April Martinez, ESAT/Laboratory Data Consultants (LDC)

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Cynthia Gurley, CLP PO USEPA Region 4
Steve Remaley, CLP PO USEPA Region 9

CLP PO: [X] FYI [ ] Action

SAMPLING ISSUES: [ ] Yes [X] No

Data Validation Report – Tier 3

Case No.: 40016
SDG No.: MY6728
Site: Iron King Mine
Laboratory: CompuChem-Liberty Analytical Corp. (LIBRTY)
Reviewer: April Martinez, ESAT/LDC
Date: August 30, 2010

I. CASE SUMMARY

Sample Information

Samples: MY6728, MY6729, MY6730, MY6731, MY6732, MY6733, MY6734, MY6735, MY6736, MY6737, MY6738, MY6739, MY6740, MY6741, MY6742, MY6743, MY6744, MY6745, MY6746, and MY6747

Concentration and Matrix: Low Concentration Soil
Analysis: CLP Total Metals and Total Cyanide
SOW: ILM05.4
Collection Date: May 2, 2010
Sample Receipt Date: May 4, 2010
Preparation Date: May 4 and 5, 2010
Analysis Date: May 5, 6, and 7, 2010

Field QC

Field Blanks (FB): *MY67C7* and *MY67C9* (See Additional Comments)
Equipment Blanks (EB): *MY6797* (See Additional Comments)
Background Samples (BG): MY6728 through MY6747
Field Duplicates (D1): MY6747 and *MY6748* (See Additional Comments)

Laboratory QC

Method Blank & Associated Samples: Preparation Blank-Soil (PBS) and samples listed above
Matrix Spike: MY6747S
Duplicates: MY6747D
ICP Serial Dilution: MY6747L

Analysis: CLP Total Metals and Total Cyanide

Analyte	Sample Preparation and Digestion Date	Analysis Date
ICP-AES Metals	May 5, 2010	May 7, 2010
Mercury	May 5, 2010	May 6, 2010
Cyanide	May 5, 2010	May 6, 2010
Percent Solids	May 4, 2010	May 5, 2010

CLP PO Action

None.

Sampling Issues

None.

Additional Comments

The results for field blank samples *MY67C7* and *MY67C9*, collected with the samples of this sample delivery group (SDG), are located in SDG MY6760. No qualification of data due to field blank contamination is warranted.

The results for equipment blank sample *MY679*, collected with the samples of this sample delivery group (SDG), are located in SDG MY6760. Qualification of data due to low level equipment blank contamination is warranted. See Validation and Comment section, Comment B for details.

The results for sample *MY6748*, the field duplicate of sample MY6747, are included in SDG MY6748.

The results for several analytes in background samples MY6728 through MY6747 exceed the respective contract required quantitation limits (CRQLs). Please refer to Table 1A for background sample results.

All method requirements specified in the EPA Contract Laboratory Program (CLP) Inorganic Statement of Work (SOW), except as noted, have been met.

Analytical results are listed in Table 1A with qualifications. Definitions of data qualifiers used in Table 1A are provided in Table 1B.

This report was prepared in accordance with the following documents:

- Region 9 Standard Operating Procedure 906, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Inorganic Data Packages*;
- *USEPA Contract Laboratory Program Statement of Work For Inorganic Analysis Multi-Media, Multi-Concentration* ILM05.3, March 2004;
- *ILM05.3 to ILM05.4 Summary of Changes*, December 1, 2006; and
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	Parameter	Acceptable	Comment
1.	Data Completeness	Yes	
2.	Sample Preservation and Holding Times	Yes	
3.	Calibration	Yes	
	a. Initial		
	b. Initial and Continuing Calibration Verification		
	c. CRQL Check Standard (CRI)		
4.	Blanks	Yes	B
5.	ICP Interference Check Sample (ICS)	No	C
6.	Laboratory Control Sample (LCS)	Yes	
7.	Duplicate Sample Analysis	Yes	
8.	Matrix Spike Sample Analysis	No	D
9.	ICP Serial Dilution Analysis	No	E
10.	Field Duplicate Sample Analysis	No	F
11.	Sample Quantitation	Yes	A
12.	Overall Assessment	Yes	

III. VALIDITY AND COMMENTS

A. Results above the method detection limit but below the contract required quantitation limit (denoted with an "L" qualifier) are estimated and flagged "J" in Table 1A.

Results above the method detection limit (MDL) but below the contract required quantitation limit (CRQL) are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of quantitation.

B. The following results are reported as non-detected (U) in Table 1A due to low level preparation blank (PBW) or equipment blank (EB) contamination.

- Beryllium in all samples
- Sodium in all samples except MY6747

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Beryllium	MY6797 (EB)	0.084
Sodium	PBW	31.6

Sample results less than 5 times the amount in an associated blank that are greater than or equal to the MDL but less than the CRQL are reported as non-detected (U) at the respective CRQL.

A preparation blank is an analytical control that contains distilled, deionized water, or baked sand for solid matrices, and reagents, which is carried through the entire analytical procedure. The preparation blank is used to determine the level of contamination introduced by the laboratory during preparation and analysis.

An equipment blank is reagent water that has been collected as a sample using decontaminated sampling equipment. The intent of an equipment blank is to monitor contamination introduced by the sampling activity, although any laboratory introduced contamination will also be present.

C. The following results are estimated and flagged "J" or "UJ" in Table 1A because sample concentrations of iron exceed the concentrations in the interelement check sample (ICS).

- Cadmium, lead, and selenium in all samples
- Thallium in samples MY6734, MY6736, MY6737, MY6740, and MY6742 through MY6746

Results for the analytes listed above were reported from undiluted analyses that contained iron at concentrations that exceed 120% of the ICSAB solution concentration. Therefore, the instrument applied interelement correction (IEC) factors may not compensate sufficiently for the interference. The results for cadmium and lead may be biased high and false positives may exist. However, the results for selenium and thallium may be biased low and false negatives may exist.

The ICP ICS solutions A and AB are analyzed to determine the effects of high concentrations of interfering elements on each analyte determined by ICP. Solution A consists of the interferents (Al, Ca, Fe, and Mg), and Solution AB consists of the analytes mixed with the interferents.

D. The following results are estimated and flagged "J" or "UJ" in Table 1A because matrix spike recovery results are outside method QC limits.

- Antimony, copper, and selenium in all samples

The matrix spike recovery results for QC sample MY6747S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	16	-84
Copper	135	+35
Selenium	67	-33

Results above the MDL are considered quantitatively uncertain. Results reported for antimony and selenium in all samples may be biased low. However, results reported for copper may be biased high.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY6747A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	85
Copper	96
Selenium	81

Since the post-digestion spike recovery results were acceptable for antimony, copper, and selenium, the low pre-digestion spike recovery results may indicate poor laboratory technique or matrix effects which may interfere with accurate analysis.

The matrix spike sample analysis provides information about the effect of the sample matrix on the digestion and measurement methodology.

E. The following results are estimated and flagged "J" in Table 1A because ICP serial dilution results are outside method QC limits.

- Arsenic, calcium, iron, lead, magnesium, nickel, and zinc in all samples

The percent difference for the ICP serial dilution analysis of sample MY6747L did not meet the ±10% difference criterion for the analytes shown below.

Analyte	% Difference
Arsenic	12
Calcium	12
Iron	12
Lead	15
Magnesium	11
Nickel	11
Zinc	14

Results reported for analytes listed above in all samples are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The results for the diluted sample were higher than the original. Therefore, the reported sample results may be biased low.

A five-fold dilution of the laboratory QC sample is performed in association with the ICP procedure to indicate whether interference exists due to sample matrix effects. If the analyte concentration is sufficiently high (minimally a factor of 50 above the MDL in the original sample), the five-fold serial dilution must agree within 10% of the original results after correction for dilution.

F. A comparison of field duplicate pair results indicates the following relative percent difference (RPD) exceeds the 35 RPD laboratory criterion for precision.

Analyte	MY6747 (D1) mg/kg	MY6748 (D1) mg/kg	RPD
Barium	238	373	44
Manganese	947	2470	89

Since sampling variability is included in the measurement, field duplicate results are expected to vary more than laboratory duplicates. The effect on data quality is not known.

The analysis of field duplicate samples is a measure of both field and analytical precision. The imprecision in the results of the analysis of the field duplicate pair may be due to the sample matrix, high levels of solids in the sample, poor sampling, or laboratory technique.

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

ICF International / Laboratory Data Consultants
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

MEMORANDUM

TO: Monika O'Sullivan, Remedial Project Manager
Arizona and Navajo Site Section, SFD-6-2

THROUGH: Rose Fong, ESAT Task Order Manager (TOM)
Quality Assurance (QA) Program, MTS-3

FROM: Doug Lindelof, Data Review Task Manager
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00705009

DATE: August 19, 2010

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Iron King Mine
Site Account No.:	09 MX QB00
CERCLIS ID No.:	AZ0000309013
Case No.:	40016
SDG No.:	MY6768
Laboratory:	CompuChem-Liberty Analytical Corp. (LIBRTY)
Analysis:	CLP Total Metals plus Total Cyanide
Samples:	20 Groundwaters (see Case Summary)
Collection Date:	May 4, 5, and 6, 2010
Reviewer:	Laurie Smith, ESAT/Laboratory Data Consultants (LDC)

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Cynthia Gurley, CLP PO USEPA Region 4
Steve Remaley, CLP PO USEPA Region 9

CLP PO: [X] FYI [ ] Action

SAMPLING ISSUES: [X] Yes [ ] No

Data Validation Report – Tier 3

Case No.: 40016
SDG No.: MY6768
Site: Iron King Mine
Laboratory: CompuChem-Liberty Analytical Corp. (LIBRTY)
Reviewer: Laurie Smith, ESAT/LDC
Date: August 19, 2010

I. CASE SUMMARY

Sample Information

Samples:	MY6768, MY6769, MY6770, MY6771, MY6772, MY6773, MY6774, MY6775, MY6776, MY6778, MY6779, MY6780, MY6782, MY6787, MY67A1, MY67A2, MY67A3, MY67D1, MY67D2, and MY67D3
Concentration and Matrix:	Low Concentration Groundwater
Analysis:	CLP Total Metals and Total Cyanide
SOW:	ILM05.4
Collection Date:	May 4, 5, and 6, 2010
Sample Receipt Date:	May 7 and 8, 2010
Preparation Date:	May 13, 14, and 15, 2010
Analysis Date:	May 14, 16, 17, 23, and 24, 2010

Field QC

Field Blanks (FB):	MY67D1, MY67D2, and MY67D3 (See Additional Comments)
Equipment Blanks (EB):	MY67A1, MY67A2, and MY67A3 (See Additional Comments)
Background Samples (BG):	Not Provided
Field Duplicates (D1):	MY6779 and MY6780

Laboratory QC

Method Blank & Associated Samples:	Preparation Blank-Water (PBW) and samples listed above
Matrix Spike:	MY6779S
Duplicates:	MY6779D
ICP Serial Dilution:	MY6779L

Analysis: CLP Total Metals and Total Cyanide

Analyte	Sample Preparation and Digestion Date	Analysis Date
ICP-AES Metals	May 13, 2010	May 23 and 24, 2010
Mercury	May 13 and 14, 2010	May 14 and 16, 2010
Cyanide	May 13 and 15, 2010	May 14 and 17, 2010

CLP PO Action

None.

Sampling Issues

The field quality control (QC) samples MY67A1, MY67A2, MY67A3, MY67D1, MY67D2, and MY67D3 were not sent blind to the laboratory.

Additional Comments

The Field QA/QC Summary form for this case indicates samples MY67A2 and MY67D2, equipment and field blanks, respectively, are associated with the groundwater samples of this SDG collected on May 5, 2010.

The following samples were diluted and re-analyzed due to high analyte concentrations that exceed the instrument's linear range.

Sample	Dilution	Analyte
MY6768	2-fold	Calcium
MY6769	2-fold	Calcium
MY6770	2-fold	Calcium
MY6771	2-fold	Calcium

The Traffic Report/Chain of Custody (TR/COC) Record forms indicate that samples for cyanide analysis were not provided for sample numbers MY6769, MY6771, MY6773, and MY6775.

All method requirements specified in the EPA Contract Laboratory Program (CLP) Inorganic Statement of Work (SOW), except as noted, have been met.

Analytical results are listed in Table 1A with qualifications. Definitions of data qualifiers used in Table 1A are provided in Table 1B.

This report was prepared in accordance with the following documents:

- Region 9 Standard Operating Procedure 906, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Inorganic Data Packages*;
- *USEPA Contract Laboratory Program Statement of Work For Inorganic Analysis Multi-Media, Multi-Concentration* ILM05.3, March 2004;
- *ILM05.3 to ILM05.4 Summary of Changes*, December 1, 2006; and
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	Parameter	Acceptable	Comment
1.	Data Completeness	Yes	
2.	Sample Preservation and Holding Times	Yes	
3.	Calibration	Yes	
	a. Initial		
	b. Initial and Continuing Calibration Verification		
	c. CRQL Check Standard (CRI)		
4.	Blanks	Yes	B
5.	ICP Interference Check Sample (ICS)	Yes	
6.	Laboratory Control Sample (LCS)	Yes	
7.	Duplicate Sample Analysis	Yes	
8.	Matrix Spike Sample Analysis	Yes	
9.	ICP Serial Dilution Analysis	No	C
10.	Field Duplicate Sample Analysis	Yes	
11.	Sample Quantitation	Yes	A
12.	Overall Assessment	Yes	

III. VALIDITY AND COMMENTS

A. Results above the method detection limit but below the contract required quantitation limit (denoted with an "L" qualifier) are estimated and flagged "J" in Table 1A.

Results above the method detection limit (MDL) but below the contract required quantitation limit (CRQL) are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of quantitation.

B. The following results are reported as non-detected (U) in Table 1A due to low level preparation blank (PBW) or field blank (FB) contamination.

- Mercury in sample MY6779
- Zinc in samples MY6768, MY6769, and MY6773

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, µg/L
Mercury	PBW (5-16-2010)	0.10
Zinc	MY67D2 (FB)	6.8

Sample results less than 5 times the amount in an associated blank that are greater than or equal to the MDL but less than the CRQL are reported as non-detected (U) at the respective CRQL.

A preparation blank is an analytical control that contains distilled, deionized water, or baked sand for solid matrices, and reagents, which is carried through the entire analytical procedure. The preparation blank is used to determine the level of contamination introduced by the laboratory during preparation and analysis.

A field blank is clean water prepared as a sample in the field by the sampler and shipped to the laboratory with the samples. A field blank is intended to detect contaminants that may have been introduced in the field. Contaminants that are found in the field blank which are absent in the laboratory preparation blank could be indicative of a field QC problem, a deficiency in the bottle preparation procedure, a difference in preparation of the laboratory and field blanks, or other indeterminate source of contamination.

C. The following results are estimated and flagged "J" in Table 1A because an ICP serial dilution result is outside method QC limits.

- Potassium in samples MY6768 through MY6776, MY6778, MY6779, MY6780, MY6782, and MY6787

The percent difference for the ICP serial dilution analysis of sample MY6779L did not meet the ±10% difference criterion for potassium as shown below.

Analyte	% Difference
Potassium	-19

Results reported for potassium in the samples listed above are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The potassium result for the diluted sample was lower than the original. Therefore, the reported sample results for potassium may be biased high.

A five-fold dilution of the laboratory QC sample is performed in association with the ICP procedure to indicate whether interference exists due to sample matrix effects. If the analyte concentration is sufficiently high (minimally a factor of 50 above the MDL in the original sample), the five-fold serial dilution must agree within 10% of the original results after correction for dilution.

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

ICF International / Laboratory Data Consultants
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

MEMORANDUM

TO: Monika O'Sullivan, Remedial Project Manager
Arizona and Navajo Site Section, SFD-6-2

THROUGH: Rose Fong, ESAT Task Order Manager (TOM)
Quality Assurance (QA) Program, MTS-3

FROM: Doug Lindelof, Data Review Task Manager
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00705009

DATE: August 18, 2010

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Iron King Mine
Site Account No.:	09 MX QB00
CERCLIS ID No.:	AZ0000309013
Case No.:	40016
SDG No.:	MY6783
Laboratory:	ALS Laboratory Group (DATAC)
Analysis:	CLP Total Metals plus Total Cyanide
Samples:	18 Groundwater (see Case Summary)
Collection Date:	May 7, 8, 10, and 11, 2010
Reviewer:	Nanny Bosch, ESAT/Laboratory Data Consultants (LDC)

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Carol Beard, CLP PO USEPA Region 8
Steve Remaley, CLP PO USEPA Region 9

CLP PO: [X] FYI [ ] Action

SAMPLING ISSUES: [X] Yes [ ] No

Data Validation Report – Tier 3

Case No.: 40016
SDG No.: MY6783
Site: Iron King Mine
Laboratory: ALS Laboratory Group (DATAC)
Reviewer: Nanny Bosch, ESAT/LDC
Date: August 18, 2010

I. CASE SUMMARY

Sample Information

Samples: MY6781, MY6783, MY6788, MY6790, MY6792, MY6794, MY6795, MY67A7, MY67D7, MY6BL8, MY6BL9, MY6BM2, MY6BM3, MY6BM4, MY6BM5, MY6BM7, MY6BM9, and MY6BN0

Concentration and Matrix: Low Concentration Groundwater
Analysis: CLP Total Metals and Total Cyanide
SOW: ILM05.4
Collection Date: May 7, 8, 10, and 11, 2010
Sample Receipt Date: May 11, 12, and 13, 2010
Preparation Date: May 19, 25, and June 1, 2010
Analysis Date: May 20, 28, 29, and June 1, 2010

Field QC

Field Blanks (FB): MY67D7
Equipment Blanks (EB): MY67A7
Background Samples (BG): Not Provided
Field Duplicates (D1): MY6BL9 and MY6BM7
Field Duplicates (D2): MY6BM2 and MY6BM9
Field Duplicates (D3): MY6BM5 and MY6BN0

Laboratory QC

Method Blank & Associated Samples: Preparation Blank-Water (PBW) and samples listed above
Matrix Spike: MY6BM3S
Duplicates: MY6BM3D
ICP Serial Dilution: MY6BM3L

Analysis: CLP Total Metals and Total Cyanide

Analyte	Sample Preparation and Digestion Date	Analysis Date
ICP-AES Metals	May 25, 2010	May 28, 29, and June 1, 2010
Mercury	June 1, 2010	June 1, 2010
Cyanide	May 19, 2010	May 20, 2010

CLP PO Action

None.

Sampling Issues

The field quality control (QC) samples MY67A7 and MY67D7 were not sent blind to the laboratory.

Additional Comments

All method requirements specified in the EPA Contract Laboratory Program (CLP) Inorganic Statement of Work (SOW), except as noted, have been met.

Analytical results are listed in Table 1A with qualifications. Definitions of data qualifiers used in Table 1A are provided in Table 1B.

This report was prepared in accordance with the following documents:

- Region 9 Standard Operating Procedure 906, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Inorganic Data Packages*;
- *USEPA Contract Laboratory Program Statement of Work For Inorganic Analysis Multi-Media, Multi-Concentration* ILM05.3, March 2004;
- *ILM05.3 to ILM05.4 Summary of Changes*, December 1, 2006; and
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	Parameter	Acceptable	Comment
1.	Data Completeness	Yes	
2.	Sample Preservation and Holding Times	Yes	
3.	Calibration	Yes	
	a. Initial		
	b. Initial and Continuing Calibration Verification		
	c. CRQL Check Standard (CRI)		
4.	Blanks	Yes	B
5.	ICP Interference Check Sample (ICS)	Yes	
6.	Laboratory Control Sample (LCS)	Yes	
7.	Duplicate Sample Analysis	No	C
8.	Matrix Spike Sample Analysis	No	D
9.	ICP Serial Dilution Analysis	Yes	
10.	Field Duplicate Sample Analysis	Yes	
11.	Sample Quantitation	Yes	A
12.	Overall Assessment	Yes	

III. VALIDITY AND COMMENTS

A. Results above the method detection limit but below the contract required quantitation limit (denoted with an "L" qualifier) are estimated and flagged "J" in Table 1A.

Results above the method detection limit (MDL) but below the contract required quantitation limit (CRQL) are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of quantitation.

B. The following results are reported as non-detected (U) in Table 1A due to low level preparation blank (PBW) or continuing calibration blank (CCB) contamination.

- Aluminum in samples MY6781, MY6790, and MY6BM3
- Antimony in all samples except MY6783, MY67A7, and MY67D7
- Arsenic in samples MY6783, MY6790, MY6792, MY6794, MY6BL8, MY6BM2, MY6BM3, MY6BM9, MY67A7, and MY67D7
- Barium in samples MY6783, MY6BL9, MY6BM3, MY6BM7, and MY67D7
- Cadmium in sample MY6783
- Calcium in samples MY67A7 and MY67D7
- Chromium in samples MY6794, MY6795, and MY6BM9
- Cobalt in sample MY6792 and MY6BL8
- Copper in samples MY6783, MY6792, MY6794, MY6BL8, MY6BM2, and MY6BN0
- Iron in samples MY6781, MY6783, MY6788, MY6790, MY6794, MY6BL8, MY6BM3, MY6BM5, and MY67A7
- Manganese in samples MY6781, MY6783, MY6788, MY6790, MY6794, MY6BM4, and MY6BM9
- Nickel in samples MY6790, MY6BM3, and MY6BM4
- Selenium in all samples except MY67A7 and MY67D7
- Thallium in samples MY6781, MY6783, MY6790, MY6792, MY6BL9, MY6BM7, and MY67A7

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, µg/L
Aluminum	PBW	37.4
Antimony	CCB2 and CCB4	2.2 and 2.7
Arsenic	PBW	2.1
Barium	PBW	1.3
Cadmium	CCB1 and CCB4	0.20 and 0.24
Calcium	PBW	58.9
Chromium	CCB1 and CCB2	0.91 and 0.93
Cobalt	CCB2 and CCB4	0.88 and 0.73
Copper	CCB1 and CCB3	0.77 and 0.67
Iron	PBW	12.628
Manganese	PBW	0.92
Nickel	CCB2 and CCB4	1.2 and 0.81
Selenium	CCB2 and CCB4	2.8 and 3.2
Thallium	PBW	1.3

Sample results less than 5 times the amount in an associated blank that are greater than or equal to the MDL but less than the CRQL are reported as non-detected (U) at the respective CRQL.

A preparation blank is an analytical control that contains distilled, deionized water, or baked sand for solid matrices, and reagents, which is carried through the entire analytical procedure. The preparation blank is used to determine the level of contamination introduced by the laboratory during preparation and analysis.

A continuing calibration blank (CCB) consists of deionized, distilled water and reagents. It is analyzed after the continuing calibration verification (CCV) standard, at a frequency of every 10 samples and at the end of the analytical run to monitor analyte carry-over.

C. The following results are estimated and flagged "J" or "UJ" in Table 1A because laboratory duplicate results are outside method QC limits.

- Copper in all samples except MY67A7 and MY67D7

Laboratory duplicate results of sample MY6BM3D do not meet the ± two times CRQL absolute difference criterion for precision as listed below.

Analyte	Laboratory Duplicate Absolute Difference, µg/L	CRQL, µg/L
Copper	71.1	25.0

Results for copper in the samples listed above are considered quantitatively uncertain.

Duplicate analyses demonstrate the analytical precision obtained for each sample matrix. The imprecision between duplicate results may be due to high levels of solids in the sample or poor laboratory technique.

D. The following results are estimated and flagged "J" or "UJ" in Table 1A because matrix spike recovery results are outside method QC limits.

- Chromium, cobalt, copper, lead, nickel, silver, and zinc in all samples except MY67A7 and MY67D7

The matrix spike recovery result for barium in QC sample MY6BM3S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Chromium	73	-27
Cobalt	73	-27
Copper	50	-50
Lead	65	-35
Nickel	74	-26
Silver	72	-28
Zinc	69	-31

Results above the MDL are considered quantitatively uncertain. Results reported for analytes in the samples listed above may be biased low.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes (except silver) fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY6BM3A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Chromium	96
Cobalt	93
Copper	100
Lead	93
Nickel	98
Zinc	96

Since the post-digestion spike recovery results were acceptable, the low pre-digestion spike recovery results obtained for analytes listed above may indicate poor laboratory technique or matrix effects which may interfere with accurate analysis by suppressing the analytical result.

The matrix spike sample analysis provides information about the effect of the sample matrix on the digestion and measurement methodology.

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

ICF International / Laboratory Data Consultants
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

MEMORANDUM

TO: Monika O'Sullivan, Remedial Project Manager
Arizona and Navajo Site Section, SFD-6-2

THROUGH: Rose Fong, ESAT Task Order Manager (TOM)
Quality Assurance (QA) Program, MTS-3

FROM: Kathleen O'Brien, Data Review Task Manager
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00705009 Amendment 1

DATE: September 9, 2010

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Iron King Mine
Site Account No.:	09 MX QB00
CERCLIS ID No.:	AZ0000309013
Case No.:	40016
SDG No.:	MY6789
Laboratory:	CompuChem-Liberty Analytical Corp. (LIBRTY)
Analysis:	CLP Total Metals and Total Cyanide
Samples:	11 Groundwaters (see Case Summary)
Collection Date:	May 6, 7, and 8, 2010
Reviewer:	Kendra DeSantolo, ESAT/Laboratory Data Consultants (LDC)

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Cynthia Gurley, CLP PO USEPA Region 4
Steve Remaley, CLP PO USEPA Region 9

CLP PO: [X] FYI [ ] Action

SAMPLING ISSUES: [ ] Yes [X] No

Data Validation Report – Tier 3

Case No.: 40016
SDG No.: MY6789
Site: Iron King Mine
Laboratory: CompuChem-Liberty Analytical Corp. (LIBRTY)
Reviewer: Kendra DeSantolo, ESAT/LDC
Date: September 9, 2010

I. CASE SUMMARY

Sample Information

Samples: MY6789, MY6793, MY67A4, MY67A5, MY67A6, MY67D4, MY67D5, MY67D6, MY6BM0, MY6BM1, and MY6BM8

Concentration and Matrix: Low Concentration Groundwater
Analysis: CLP Total Metals and Total Cyanide
SOW: ILM05.4
Collection Date: May 6, 7, and 8, 2010
Sample Receipt Date: May 8 and 11, 2010
Preparation Date: May 17, 2010
Analysis Date: May 18 and 25, 2010

Field QC

Field Blanks (FB): *MY67D4, MY67D5,* and *MY67D6* (See Additional Comments)
Equipment Blanks (EB): *MY67A4, MY67A5,* and *MY67A6* (See Additional Comments)
Background Samples (BG): Not Provided
Field Duplicates (D1): MY6BM1 and MY6BM8

Laboratory QC

Method Blank & Associated Samples: Preparation Blank-Water (PBW) and samples listed above
Matrix Spike: MY6BM1S
Duplicates: MY6BM1D
ICP Serial Dilution: MY6BM1L

Analysis: CLP Total Metals and Total Cyanide

Analyte	Sample Preparation and Digestion Date	Analysis Date
ICP-AES Metals	May 17, 2010	May 25, 2010
Mercury	May 17, 2010	May 18, 2010
Cyanide	May 17, 2010	May 18, 2010

CLP PO Action

None.

Sampling Issues

The field quality control (QC) samples MY67A4, MY67A5, MY67A6, MY67D4, MY67D5, and MY67D6 were not sent blind to the laboratory.

Additional Comments

The Field QA/QC Summary form for this case indicates field blank samples *MY67D4*, *MY67D5*, and *MY67D6* are associated with the soil samples collected on May 6, 7, and 8, 2010, respectively.

The Field QA/QC Summary form for this case indicates equipment blank samples *MY67A4*, *MY67A5*, and *MY67A6* are associated with the soil samples collected on May 6, 7, and 8, 2010, respectively.

All method requirements specified in the EPA Contract Laboratory Program (CLP) Inorganic Statement of Work (SOW), except as noted, have been met.

Analytical results are listed in Table 1A with qualifications. Definitions of data qualifiers used in Table 1A are provided in Table 1B.

This report was prepared in accordance with the following documents:

- Region 9 Standard Operating Procedure 906, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Inorganic Data Packages*;
- *USEPA Contract Laboratory Program Statement of Work For Inorganic Analysis Multi-Media, Multi-Concentration* ILM05.3, March 2004;
- *ILM05.3 to ILM05.4 Summary of Changes*, December 1, 2006; and
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	Parameter	Acceptable	Comment
1.	Data Completeness	Yes	
2.	Sample Preservation and Holding Times	Yes	
3.	Calibration	Yes	
	a. Initial		
	b. Initial and Continuing Calibration Verification		
	c. CRQL Check Standard (CRI)		
4.	Blanks	Yes	B
5.	ICP Interference Check Sample (ICS)	Yes	
6.	Laboratory Control Sample (LCS)	Yes	
7.	Duplicate Sample Analysis	No	C
8.	Matrix Spike Sample Analysis	No	D
9.	ICP Serial Dilution Analysis	No	E
10.	Field Duplicate Sample Analysis	No	F
11.	Sample Quantitation	Yes	A
12.	Overall Assessment	Yes	

III. VALIDITY AND COMMENTS

A. Results above the method detection limit but below the contract required quantitation limit (denoted with an "L" qualifier) are estimated and flagged "J" in Table 1A.

Results above the method detection limit (MDL) but below the contract required quantitation limit (CRQL) are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of quantitation.

B. The following results are reported as non-detected (U) in Table 1A due to low level preparation blank (PBW) and continuing calibration (CCB) contamination.

- Iron in sample MY67D6
- Zinc in samples MY6789, MY67A5, MY67D6, and MY6BM0

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, µg/L
Iron	CCB17	17.1
Zinc	PBW	5.0

Sample results less than 5 times the amount in an associated blank that are greater than or equal to the MDL but less than the CRQL are reported as non-detected (U) at the respective CRQL.

A preparation blank is an analytical control that contains distilled, deionized water, or baked sand for solid matrices, and reagents, which is carried through the entire analytical procedure. The preparation blank is used to determine the level of contamination introduced by the laboratory during preparation and analysis.

A continuing calibration blank (CCB) consists of deionized, distilled water and reagents. It is analyzed after the continuing calibration verification (CCV) standard, at a frequency of every 10 samples and at the end of the analytical run to monitor analyte carry-over.

C. The following results are estimated and flagged "J" in Table 1A because a laboratory duplicate result is outside method QC limits.

- Iron in samples MY6789, MY6793, MY6BM0, MY6BM1, and MY6BM8

Laboratory duplicate results of sample MY6BM1D do not meet the ≤ 20 relative percent difference (RPD) for water criterion for precision as listed below.

Analyte	Laboratory Duplicate, RPD
Iron	22

Results for iron in the samples listed above are considered quantitatively uncertain.

Duplicate analyses demonstrate the analytical precision obtained for each sample matrix. The imprecision between duplicate results may be due to high levels of solids in the sample or poor laboratory technique.

D. The following results are estimated and flagged "J" in Table 1A because a matrix spike recovery result is outside method QC limits.

- Iron in samples MY6BM1 and MY6BM8

The matrix spike recovery result for QC sample MY6BM1S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Iron	259	+159

Results above the MDL are considered quantitatively uncertain. Results reported for iron in the samples listed above may be biased high.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY6BM1A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Iron	94

Since the post-digestion spike recovery result was acceptable for iron, the high pre-digestion spike recovery result may indicate poor laboratory technique or matrix effects which may interfere with accurate analysis.

The matrix spike sample analysis provides information about the effect of the sample matrix on the digestion and measurement methodology.

E. The following results are estimated and flagged "J" in Table 1A because an ICP serial dilution result is outside method QC limits.

- Potassium in samples MY6789, MY6793, MY6BM0, MY6BM1, and MY6BM8

The percent difference for the ICP serial dilution analysis of sample MY6BM1L did not meet the ±10% difference criterion for the analytes shown below.

Analyte	% Difference
Potassium	-11

Results reported for potassium in the samples listed above are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The potassium result for the diluted sample was lower than the original. Therefore, the reported potassium results may be biased high.

A five-fold dilution of the laboratory QC sample is performed in association with the ICP procedure to indicate whether interference exists due to sample matrix effects. If the analyte concentration is sufficiently high (minimally a factor of 50 above the MDL in the original sample), the five-fold serial dilution must agree within 10% of the original results after correction for dilution.

F. A comparison of field duplicate pair results indicates the following relative percent difference (RPD) exceeds the 20 RPD laboratory criterion for precision.

Analyte	MY6BM1(D1) µg/L	MY6BM8 (D1) µg/L	RPD
Iron	893	539	49

Since sampling variability is included in the measurement, field duplicate results are expected to vary more than laboratory duplicates. The effect on data quality is not known.

The analysis of field duplicate samples is a measure of both field and analytical precision. The imprecision in the results of the analysis of the field duplicate pair may be due to the sample matrix, high levels of solids in the sample, poor sampling, or laboratory technique.

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

ICF International / Laboratory Data Consultants
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

MEMORANDUM

TO: Monika O'Sullivan, Remedial Project Manager
Arizona and Navajo Site Section, SFD-6-2

THROUGH: Rose Fong, ESAT Task Order Manager (TOM)
Quality Assurance (QA) Program, MTS-3

FROM: Kathleen O'Brien, Data Review Task Manager
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00705009 Amendment 1

DATE: September 3, 2010

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Iron King Mine
Site Account No.:	09 MX QB00
CERCLIS ID No.:	AZ0000309013
Case No.:	40016
SDG No.:	MY67Y5
Laboratory:	CompuChem-Liberty Analytical Corp. (LIBRTY)
Analysis:	CLP Total Metals and Total Cyanide
Samples:	20 Soils (see Case Summary)
Collection Date:	May 4, 2010
Reviewer:	Calvin Tanaka, ESAT/Laboratory Data Consultants (LDC)

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Cynthia Gurley, CLP PO USEPA Region 4
Steve Remaley, CLP PO USEPA Region 9

CLP PO: [X] FYI [ ] Action

SAMPLING ISSUES: [ ] Yes [X] No

Data Validation Report – Tier 3

Case No.: 40016
SDG No.: MY67Y5
Site: Iron King Mine
Laboratory: CompuChem-Liberty Analytical Corp. (LIBRTY)
Reviewer: Calvin Tanaka, ESAT/LDC
Date: September 3, 2010

I. CASE SUMMARY

Sample Information

Samples: MY67Y5, MY67Y6, MY67Y7, MY67Y8, MY67Y9, MY67Z0, MY67Z1, MY67Z2, MY67Z3, MY67Z4, MY67Z5, MY67Z6, MY67Z7, MY67Z8, MY67Z9, MY6800, MY6801, MY6802, MY6803, and MY6804

Concentration and Matrix: Low Concentration Soil
Analysis: CLP Total Metals and Total Cyanide
SOW: ILM05.4
Collection Date: May 4, 2010
Sample Receipt Date: May 6, 2010
Preparation Date: May 9, 10, and 11, 2010
Analysis Date: May 10, 11, 12, 21, and 22, 2010

Field QC

Field Blanks (FB): *MY67D1* (See Additional Comments)
Equipment Blanks (EB): *MY67A1* (See Additional Comments)
Background Samples (BG): Not Provided
Field Duplicates (D1): MY67Z1 and MY67Z2
Field Duplicates (D2): MY6802 and MY6803

Laboratory QC

Method Blank & Associated Samples: Preparation Blank-Soil (PBS) and samples listed above
Matrix Spike: MY67Z1S
Duplicates: MY67Z1D
ICP Serial Dilution: MY67Z1L

Analysis: CLP Total Metals and Total Cyanide

Analyte	Sample Preparation and Digestion Date	Analysis Date
ICP-AES Metals	May 10, 2010	May 21 and 22, 2010
Mercury	May 10, 2010	May 11, 2010
Cyanide	May 11, 2010	May 12, 2010
Percent Solids	May 9, 2010	May 10, 2010

CLP PO Action

None.

Sampling Issues

None.

Additional Comments

The results for equipment blank sample *MY67A1* and field blank sample *MY67D1*, collected with the samples of this sample delivery group (SDG), are located in SDG MY6768. No qualification of data due to equipment blank or field blank contamination is warranted.

All method requirements specified in the EPA Contract Laboratory Program (CLP) Inorganic Statement of Work (SOW), except as noted, have been met.

Analytical results are listed in Table 1A with qualifications. Definitions of data qualifiers used in Table 1A are provided in Table 1B.

This report was prepared in accordance with the following documents:

- Region 9 Standard Operating Procedure 906, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Inorganic Data Packages*;
- *USEPA Contract Laboratory Program Statement of Work For Inorganic Analysis Multi-Media, Multi-Concentration* ILM05.3, March 2004;
- *ILM05.3 to ILM05.4 Summary of Changes*, December 1, 2006; and
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	Parameter	Acceptable	Comment
1.	Data Completeness	Yes	
2.	Sample Preservation and Holding Times	Yes	
3.	Calibration	Yes	
	a. Initial		
	b. Initial and Continuing Calibration Verification		
	c. CRQL Check Standard (CRI)		
4.	Blanks	Yes	B
5.	ICP Interference Check Sample (ICS)	No	C
6.	Laboratory Control Sample (LCS)	Yes	
7.	Duplicate Sample Analysis	No	D
8.	Matrix Spike Sample Analysis	No	E
9.	ICP Serial Dilution Analysis	No	F
10.	Field Duplicate Sample Analysis	No	G
11.	Sample Quantitation	Yes	A
12.	Overall Assessment	Yes	

III. VALIDITY AND COMMENTS

A. Results above the method detection limit but below the contract required quantitation limit (denoted with an "L" qualifier) are estimated and flagged "J" in Table 1A.

Results above the method detection limit (MDL) but below the contract required quantitation limit (CRQL) are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of quantitation.

B. The following results are reported as non-detected (U) in Table 1A due to low level preparation blank (PBW) or continuing calibration blank (CCB) contamination.

- Antimony in samples MY67Y5 through MY67Y8, MY67Z0, MY67Z1, MY67Z3 through MY67Z8, MY6802, and MY6804
- Selenium in samples MY67Y5 through MY67Z0, MY67Z2 through MY67Z6, MY67Z8 through MY6800, and MY6802 through MY6804
- Sodium in all samples except MY67Z4

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Antimony	PBW	1.2
Selenium	CCB4 (5/21/2010)	0.26
Selenium	CCB1 (5/22/2010)	0.19
Sodium	PBW	39.5

Sample results less than 5 times the amount in an associated blank that are greater than or equal to the MDL but less than the CRQL are reported as non-detected (U) at the respective CRQL.

A preparation blank is an analytical control that contains distilled, deionized water, or baked sand for solid matrices, and reagents, which is carried through the entire analytical procedure. The preparation blank is used to determine the level of contamination introduced by the laboratory during preparation and analysis.

A continuing calibration blank (CCB) consists of deionized, distilled water and reagents. It is analyzed after the continuing calibration verification (CCV) standard, at a frequency of every 10 samples and at the end of the analytical run to monitor analyte carry-over.

C. The following results are estimated and flagged "J" in Table 1A because sample concentrations of iron exceed the concentrations in the interelement check sample (ICS).

- Cadmium, selenium, and thallium in all samples

Results for the analytes listed above were reported from undiluted analyses that contained iron at concentrations that exceed 120% of the ICSAB solution concentration. Therefore, the instrument applied interelement correction (IEC) factors may not compensate sufficiently for the interference. The results for cadmium and thallium may be biased high and false positives may exist. However, the results for selenium may be biased low and false negatives may exist.

The ICP ICS solutions A and AB are analyzed to determine the effects of high concentrations of interfering elements on each analyte determined by ICP. Solution A consists of the interferents (Al, Ca, Fe, and Mg), and Solution AB consists of the analytes mixed with the interferents.

D. The following results are estimated and flagged "J" in Table 1A because laboratory duplicate results are outside method QC limits.

- Manganese in all samples

Laboratory duplicate results of sample MY67Z1D do not meet the ≤ 35 relative percent difference (RPD) for soil criterion for precision as listed below.

Analyte	Laboratory Duplicate, RPD
Manganese	46

Results for analytes listed above in all samples are considered quantitatively uncertain.

Duplicate analyses demonstrate the analytical precision obtained for each sample matrix. The imprecision between duplicate results may be due to high levels of solids in the sample or poor laboratory technique.

E. The following results are estimated and flagged "J", "J+", or "UJ" in Table 1A because matrix spike recovery results are outside method QC limits.

- Antimony, selenium, copper, silver, and zinc in all samples

The matrix spike recovery results for QC sample MY67Z1S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	7	-93
Selenium	63	-37
Silver	53	-47
Zinc	73	-27

Results above the MDL are considered quantitatively uncertain. Results reported for the analytes listed above in all samples may be biased low.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY67Z1A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	79
Selenium	70
Silver	87
Zinc	69

Since the post-digestion spike recovery results were acceptable for antimony and silver, the low pre-digestion spike recovery results may indicate poor laboratory technique or matrix effects which may interfere with accurate analysis. However, since both the post- and pre-digestion spikes did not meet the QC criteria for selenium and zinc, the low pre-digestion spike recovery results may indicate poor laboratory technique or matrix effects which may interfere with accurate analysis by suppressing the analytical result.

The matrix spike sample analysis provides information about the effect of the sample matrix on the digestion and measurement methodology.

F. The following results are estimated and flagged "J" in Table 1A because an ICP serial dilution result is outside method QC limits.

- Lead, manganese, potassium in all samples

The percent difference for the ICP serial dilution analysis of sample MY67Y5L did not meet the ±10% difference criterion for potassium as shown below.

Analyte	% Difference
Lead	+15
Manganese	+11
Potassium	-14

Results reported for the analytes listed above in all samples are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The lead and manganese results for the diluted sample were higher than the original. Therefore, the reported lead and manganese results may be biased low. However, since the potassium result for the diluted sample was lower than the original, the reported potassium results may be biased high.

A five-fold dilution of the laboratory QC sample is performed in association with the ICP procedure to indicate whether interference exists due to sample matrix effects. If the analyte concentration is sufficiently high (minimally a factor of 50 above the MDL in the original sample), the five-fold serial dilution must agree within 10% of the original results after correction for dilution.

G. A comparison of field duplicate pair results indicates the following relative percent difference (RPD) exceeds the 35 RPD laboratory criterion for precision.

Analyte	MY6802 (D2) mg/kg	MY6803 (D2) mg/kg	RPD
Lead	32.8	50.1	42

Since sampling variability is included in the measurement, field duplicate results are expected to vary more than laboratory duplicates. The effect on data quality is not known.

The analysis of field duplicate samples is a measure of both field and analytical precision. The imprecision in the results of the analysis of the field duplicate pair may be due to the sample matrix, high levels of solids in the sample, poor sampling, or laboratory technique.

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

ICF International / Laboratory Data Consultants
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

MEMORANDUM

TO: Monika O'Sullivan, Remedial Project Manager
Arizona and Navajo Site Section, SFD-6-2

THROUGH: Rose Fong, ESAT Task Order Manager (TOM)
Quality Assurance (QA) Program, MTS-3

FROM: Doug Lindelof, Data Review Task Manager
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00705009 Amendment 1

DATE: August 26, 2010

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Iron King Mine
Site Account No.:	09 MX QB00
CERCLIS ID No.:	AZ0000309013
Case No.:	40016
SDG No.:	MY6835
Laboratory:	CompuChem-Liberty Analytical Corp. (LIBRTY)
Analysis:	CLP Total Metals plus Total Cyanide
Samples:	20 Soils (see Case Summary)
Collection Date:	May 5, 2010
Reviewer:	Laurie Smith, ESAT/Laboratory Data Consultants (LDC)

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Cynthia Gurley, CLP PO USEPA Region 4
Steve Remaley, CLP PO USEPA Region 9

CLP PO: [X] FYI [ ] Action

SAMPLING ISSUES: [ ] Yes [X] No

Data Validation Report – Tier 3

Case No.: 40016
SDG No.: MY6835
Site: Iron King Mine
Laboratory: CompuChem-Liberty Analytical Corp. (LIBRTY)
Reviewer: Laurie Smith, ESAT/LDC
Date: August 26, 2010

I. CASE SUMMARY

Sample Information

Samples: MY6835, MY6836, MY6837, MY6838, MY6839, MY6840, MY6841, MY6842, MY6843, MY6844, MY6845, MY6846, MY6847, MY6848, MY6849, MY6850, MY6851, MY6852, MY6853, and MY6854

Concentration and Matrix: Low Concentration Soil
Analysis: CLP Total Metals and Total Cyanide
SOW: ILM05.4
Collection Date: May 5, 2010
Sample Receipt Date: May 7, 2010
Preparation Date: May 12 and 13, 2010
Analysis Date: May 13, 14, 21, and 22, 2010

Field QC

Field Blanks (FB): MY67D3 (See Additional Comments)
Equipment Blanks (EB): MY67A3 (See Additional Comments)
Background Samples (BG): Not Provided
Field Duplicates (D1): MY6835 and MY6836
Field Duplicates (D2): MY6846 and MY6847

Laboratory QC

Method Blank & Associated Samples: Preparation Blank-Soil (PBS) and samples listed above
Matrix Spike: MY6835S
Duplicates: MY6835D
ICP Serial Dilution: MY6835L

Analysis: CLP Total Metals and Total Cyanide

Analyte	Sample Preparation and Digestion Date	Analysis Date
ICP-AES Metals	May 12, 2010	May 21 and 22, 2010
Mercury	May 12, 2010	May 13, 2010
Cyanide	May 13, 2010	May 14, 2010
Percent Solids	May 12, 2010	May 13, 2010

CLP PO Action

None.

Sampling Issues

None.

Additional Comments

The results for equipment blank sample MY67A4 and field blank sample MY67D4, collected with the samples of this sample delivery group (SDG), are located in SDG MY6789. No qualification of data due to equipment blank or field blank contamination is warranted.

All method requirements specified in the EPA Contract Laboratory Program (CLP) Inorganic Statement of Work (SOW), except as noted, have been met.

Analytical results are listed in Table 1A with qualifications. Definitions of data qualifiers used in Table 1A are provided in Table 1B.

This report was prepared in accordance with the following documents:

- Region 9 Standard Operating Procedure 906, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Inorganic Data Packages*;
- *USEPA Contract Laboratory Program Statement of Work For Inorganic Analysis Multi-Media, Multi-Concentration* ILM05.3, March 2004;
- *ILM05.3 to ILM05.4 Summary of Changes*, December 1, 2006; and
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	Parameter	Acceptable	Comment
1.	Data Completeness	Yes	
2.	Sample Preservation and Holding Times	Yes	
3.	Calibration	Yes	
	a. Initial		
	b. Initial and Continuing Calibration Verification		
	c. CRQL Check Standard (CRI)		
4.	Blanks	Yes	B
5.	ICP Interference Check Sample (ICS)	No	C
6.	Laboratory Control Sample (LCS)	Yes	
7.	Duplicate Sample Analysis	Yes	
8.	Matrix Spike Sample Analysis	No	D
9.	ICP Serial Dilution Analysis	Yes	
10.	Field Duplicate Sample Analysis	No	E
11.	Sample Quantitation	Yes	A
12.	Overall Assessment	Yes	

III. VALIDITY AND COMMENTS

A. Results above the method detection limit but below the contract required quantitation limit (denoted with an "L" qualifier) are estimated and flagged "J" in Table 1A.

Results above the method detection limit (MDL) but below the contract required quantitation limit (CRQL) are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of quantitation.

B. The following results are reported as non-detected (U) in Table 1A due to low level preparation blank (PBW) contamination.

- Sodium in all samples except MY6846 through MY6850

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Sodium	PBW	108

Sample results less than 5 times the amount in an associated blank that are greater than or equal to the MDL but less than the CRQL are reported as non-detected (U) at the respective CRQL.

A preparation blank is an analytical control that contains distilled, deionized water, or baked sand for solid matrices, and reagents, which is carried through the entire analytical procedure. The preparation blank is used to determine the level of contamination introduced by the laboratory during preparation and analysis.

C. The following results are estimated and flagged "J" or "UJ" in Table 1A because sample concentrations of iron exceed the concentrations in the interelement check sample (ICS).

- Cadmium in all samples except MY6837
- Lead in samples MY6835 through MY6838, MY6841, MY6842, MY6843, MY6848, MY6853, and MY6854
- Selenium in samples MY6846, MY6848, and MY6850 through MY6854
- Thallium in samples MY6850 through MY6854

Results for the analytes listed above were reported from undiluted analyses that contained iron at concentrations that exceed 120% of the ICSAB solution concentration. Therefore, the instrument applied interelement correction (IEC) factors may not compensate sufficiently for the interference. The results for cadmium and lead may be biased high and false positives may exist. However, the results for selenium and thallium may be biased low and false negatives may exist.

The ICP ICS solutions A and AB are analyzed to determine the effects of high concentrations of interfering elements on each analyte determined by ICP. Solution A consists of the interferents (Al, Ca, Fe, and Mg), and Solution AB consists of the analytes mixed with the interferents.

D. The following results are estimated and flagged "J" in Table 1A because matrix spike recovery results are outside method QC limits.

- Antimony, arsenic, and lead in all samples

The matrix spike recovery results for QC sample MY6835S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	18	-82
Arsenic	55	-45
Lead	24	-76

Results above the MDL are considered quantitatively uncertain. Results reported for antimony, arsenic, and lead in all samples may be biased low.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY6835A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	90
Arsenic	111
Lead	112

Since the post-digestion spike recovery results were acceptable for antimony, arsenic, and lead, the low pre-digestion spike recovery results may indicate poor laboratory technique or matrix effects which may interfere with accurate analysis.

The matrix spike sample analysis provides information about the effect of the sample matrix on the digestion and measurement methodology.

E. A comparison of field duplicate pair results indicates the following relative percent difference (RPD) exceeds the 35 RPD laboratory criterion for precision.

Analyte	MY6835 (D1) mg/kg	MY6836 (D1) mg/kg	RPD
Arsenic	23.4	16.0	38

Since sampling variability is included in the measurement, field duplicate results are expected to vary more than laboratory duplicates. The effect on data quality is not known.

The analysis of field duplicate samples is a measure of both field and analytical precision. The imprecision in the results of the analysis of the field duplicate pair may be due to the sample matrix, high levels of solids in the sample, poor sampling, or laboratory technique.

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

ICF International / Laboratory Data Consultants
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

MEMORANDUM

TO: Monika O'Sullivan, Remedial Project Manager
Arizona and Navajo Site Section, SFD-6-2

THROUGH: Rose Fong, ESAT Task Order Manager (TOM)
Quality Assurance (QA) Program, MTS-3

FROM: Doug Lindelof, Data Review Task Manager
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00705009 Amendment 1

DATE: August 25, 2010

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Iron King Mine
Site Account No.:	09 MX QB00
CERCLIS ID No.:	AZ0000309013
Case No.:	40016
SDG No.:	MY68E5
Laboratory:	CompuChem-Liberty Analytical Corp. (LIBRTY)
Analysis:	CLP Total Metals plus Total Cyanide
Samples:	20 Soils (see Case Summary)
Collection Date:	May 6, 2010
Reviewer:	Calvin Tanaka, ESAT/Laboratory Data Consultants (LDC)

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Cynthia Gurley, CLP PO USEPA Region 4
Steve Remaley, CLP PO USEPA Region 9

CLP PO: [X] FYI [ ] Action

SAMPLING ISSUES: [ ] Yes [X] No

Data Validation Report – Tier 3

Case No.: 40016
SDG No.: MY68E5
Site: Iron King Mine
Laboratory: CompuChem-Liberty Analytical Corp. (LIBRTY)
Reviewer: Calvin Tanaka, ESAT/LDC
Date: August 25, 2010

I. CASE SUMMARY

Sample Information

Samples: MY68E5, MY68E6, MY68E7, MY68E8, MY68E9, MY68F0, MY68F1, MY68F2, MY68F3, MY68F4, MY68F5, MY68F6, MY68F7, MY68F8, MY68F9, MY68G0, MY68G1, MY68G2, MY68G3, and MY68G4

Concentration and Matrix: Low Concentration Soil
Analysis: CLP Total Metals and Total Cyanide
SOW: ILM05.4
Collection Date: May 6, 2010
Sample Receipt Date: May 8, 2010
Preparation Date: May 13, and 15, 2010
Analysis Date: May 14, 17, 24, and 25, 2010

Field QC

Field Blanks (FB): MY67D4 (See Additional Comments)
Equipment Blanks (EB): MY67A4 (See Additional Comments)
Background Samples (BG): Not Provided
Field Duplicates (D1): MY68E5 and MY68E6
Field Duplicates (D2): MY68F6 and MY68F7

Laboratory QC

Method Blank & Associated Samples: Preparation Blank-Soil (PBS) and samples listed above
Matrix Spike: MY68E5S
Duplicates: MY68E5D
ICP Serial Dilution: MY68E5L

Analysis: CLP Total Metals and Total Cyanide

Analyte	Sample Preparation and Digestion Date	Analysis Date
ICP-AES Metals	May 13, 2010	May 24 and 25, 2010
Mercury	May 13, 2010	May 14, 2010
Cyanide	May 15, 2010	May 17, 2010
Percent Solids	May 13, 2010	May 14, 2010

CLP PO Action

None.

Sampling Issues

None.

Additional Comments

The results for equipment blank sample MY67A4 and field blank sample MY67D4, collected with the samples of this sample delivery group (SDG), are located in SDG MY6789. No qualification of data due to equipment blank or field blank contamination is warranted.

The following samples were diluted and re-analyzed due to high analyte concentrations that exceed the instrument's linear range.

Sample	Dilution	Analyte
MY68E7	3-fold	Zinc
MY68F5	3-fold	Zinc

All method requirements specified in the EPA Contract Laboratory Program (CLP) Inorganic Statement of Work (SOW), except as noted, have been met.

Analytical results are listed in Table 1A with qualifications. Definitions of data qualifiers used in Table 1A are provided in Table 1B.

This report was prepared in accordance with the following documents:

- Region 9 Standard Operating Procedure 906, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Inorganic Data Packages*;
- *USEPA Contract Laboratory Program Statement of Work For Inorganic Analysis Multi-Media, Multi-Concentration* ILM05.3, March 2004;
- *ILM05.3 to ILM05.4 Summary of Changes*, December 1, 2006; and
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	Parameter	Acceptable	Comment
1.	Data Completeness	Yes	
2.	Sample Preservation and Holding Times	Yes	
3.	Calibration	Yes	
	a. Initial		
	b. Initial and Continuing Calibration Verification		
	c. CRQL Check Standard (CRI)		
4.	Blanks	Yes	B
5.	ICP Interference Check Sample (ICS)	No	C
6.	Laboratory Control Sample (LCS)	Yes	
7.	Duplicate Sample Analysis	No	D
8.	Matrix Spike Sample Analysis	No	E
9.	ICP Serial Dilution Analysis	No	F
10.	Field Duplicate Sample Analysis	No	G
11.	Sample Quantitation	Yes	A
12.	Overall Assessment	Yes	

III. VALIDITY AND COMMENTS

A. Results above the method detection limit but below the contract required quantitation limit (denoted with an "L" qualifier) are estimated and flagged "J" in Table 1A.

Results above the method detection limit (MDL) but below the contract required quantitation limit (CRQL) are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of quantitation.

B. The following results are reported as non-detected (U) in Table 1A due to low level preparation blank (PBW) contamination.

- Sodium in all samples except MY68E7

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Sodium	PBW	109

Sample results less than 5 times the amount in an associated blank that are greater than or equal to the MDL but less than the CRQL are reported as non-detected (U) at the respective CRQL.

A preparation blank is an analytical control that contains distilled, deionized water, or baked sand for solid matrices, and reagents, which is carried through the entire analytical procedure. The preparation blank is used to determine the level of contamination introduced by the laboratory during preparation and analysis.

C. The following results are estimated and flagged "J" in Table 1A because sample concentrations of iron exceed the concentrations in the interelement check sample (ICS).

- Cadmium in all samples

Results for cadmium were reported from undiluted analyses that contained iron at concentrations that exceed 120% of the ICSAB solution concentration. Therefore, the instrument applied interelement correction (IEC) factors may not compensate sufficiently for the interference. The results for cadmium may be biased high and false positives may exist.

The ICP ICS solutions A and AB are analyzed to determine the effects of high concentrations of interfering elements on each analyte determined by ICP. Solution A consists of the interferents (Al, Ca, Fe, and Mg), and Solution AB consists of the analytes mixed with the interferents.

D. The following results are estimated and flagged "J" in Table 1A because laboratory duplicate results are outside method QC limits.

- Lead and mercury in all samples

Laboratory duplicate results of sample MY68E5D do not meet the ≤ 35 relative percent difference (RPD) for soil criterion for precision as listed below.

Analyte	Laboratory Duplicate, RPD
Lead	53
Mercury	41

Results for analytes listed above in all samples are considered quantitatively uncertain.

Duplicate analyses demonstrate the analytical precision obtained for each sample matrix. The imprecision between duplicate results may be due to high levels of solids in the sample or poor laboratory technique.

E. The following results are estimated and flagged "J", "J+", or "UJ" in Table 1A because matrix spike recovery results are outside method QC limits.

- Antimony, arsenic, copper, manganese, mercury, and thallium in all samples

The matrix spike recovery results for QC sample MY68E5S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	18	-82
Arsenic	230	+130
Copper	736	+636
Manganese	61	-39
Mercury	132	+32
Thallium	74	-26

Results above the MDL are considered quantitatively uncertain. Results reported for antimony, manganese, and thallium in all samples may be biased low. However, results reported for arsenic, copper, and mercury may be biased high.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY68E5A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	87
Arsenic	110
Copper	95
Manganese	93
Thallium	65

Since the post-digestion spike recovery results were acceptable for antimony, arsenic, copper, and manganese, the low pre-digestion spike recovery results may indicate poor laboratory technique or matrix effects which may interfere with accurate analysis. However, since the post-digestion spike recovery result was not acceptable for thallium, the low pre-digestion spike recovery result may indicate poor laboratory technique or matrix effects which may interfere with accurate analysis by suppressing the analytical result.

The matrix spike sample analysis provides information about the effect of the sample matrix on the digestion and measurement methodology.

F. The following results are estimated and flagged "J" in Table 1A because an ICP serial dilution result is outside method QC limits.

- Potassium in all samples

The percent difference for the ICP serial dilution analysis of sample MY68E5L did not meet the ±10% difference criterion for potassium as shown below.

Analyte	% Difference
Potassium	-19

Results reported for potassium in the samples listed above are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The potassium result for the diluted sample was lower than the original. Therefore, the reported sample results for potassium may be biased high.

A five-fold dilution of the laboratory QC sample is performed in association with the ICP procedure to indicate whether interference exists due to sample matrix effects. If the analyte concentration is sufficiently high (minimally a factor of 50 above the MDL in the original sample), the five-fold serial dilution must agree within 10% of the original results after correction for dilution.

G. A comparison of field duplicate pair results indicates the following relative percent difference (RPD) exceeds the 35 RPD laboratory criterion for precision.

Analyte	MY68F6 (D2) mg/kg	MY68F7 (D2) mg/kg	RPD
Calcium	5360	8060	40

Since sampling variability is included in the measurement, field duplicate results are expected to vary more than laboratory duplicates. The effect on data quality is not known.

The analysis of field duplicate samples is a measure of both field and analytical precision. The imprecision in the results of the analysis of the field duplicate pair may be due to the sample matrix, high levels of solids in the sample, poor sampling, or laboratory technique.

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

ICF International / Laboratory Data Consultants
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

MEMORANDUM

TO: Monika O'Sullivan, Remedial Project Manager
Arizona and Navajo Site Section, SFD-6-2

THROUGH: Rose Fong, ESAT Task Order Manager (TOM)
Quality Assurance (QA) Program, MTS-3

FROM: Kathleen O'Brien, Data Review Task Manager
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00705009 Amendment 1

DATE: September 8, 2010

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Iron King Mine
Site Account No.:	09 MX QB00
CERCLIS ID No.:	AZ0000309013
Case No.:	40016
SDG No.:	MY68H2
Laboratory:	CompuChem-Liberty Analytical Corp. (LIBRTY)
Analysis:	CLP Total Metals and Total Cyanide
Samples:	20 Soils (see Case Summary)
Collection Date:	May 5 and 6, 2010
Reviewer:	Kendra DeSantolo, ESAT/Laboratory Data Consultants (LDC)

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Cynthia Gurley, CLP PO USEPA Region 4
Steve Remaley, CLP PO USEPA Region 9

CLP PO: [X] FYI [ ] Action

SAMPLING ISSUES: [ ] Yes [X] No

Data Validation Report – Tier 3

Case No.: 40016
SDG No.: MY68H2
Site: Iron King Mine
Laboratory: CompuChem-Liberty Analytical Corp. (LIBRTY)
Reviewer: Kendra DeSantolo, ESAT/LDC
Date: September 8, 2010

I. CASE SUMMARY

Sample Information

Samples: MY68H2, MY68H3, MY68H4, MY68H5, MY68H6, MY68H7, MY68H8, MY68H9, MY68J0, MY68J1, MY68J2, MY68J3, MY68J4, MY68J5, MY68J6, MY68J7, MY68J8, MY68J9, MY68K0, and MY68K1

Concentration and Matrix: Low Concentration Soil
Analysis: CLP Total Metals and Total Cyanide
SOW: ILM05.4
Collection Date: May 5 and 6, 2010
Sample Receipt Date: May 7, 2010
Preparation Date: May 12, and 14, 2010
Analysis Date: May 13, 17, 23, and 24, 2010

Field QC

Field Blanks (FB): *MY67D3 and MY67D4* (See Additional Comments)
Equipment Blanks (EB): *MY67A3* and *MY67A4* (See Additional Comments)
Background Samples (BG): Not Provided
Field Duplicates (D1): MY68H8 and MY68H9
Field Duplicates (D2): MY68J9 and MY68K0

Laboratory QC

Method Blank & Associated Samples: Preparation Blank-Soil (PBS) and samples listed above
Matrix Spike: MY68H8S
Duplicates: MY68H8D
ICP Serial Dilution: MY68H8L

Analysis: CLP Total Metals and Total Cyanide

Analyte	Sample Preparation and Digestion Date	Analysis Date
ICP-AES Metals	May 12, 2010	May 23 and 24, 2010
Mercury	May 12, 2010	May 13, 2010
Cyanide	May 14, 2010	May 17, 2010
Percent Solids	May 12, 2010	May 13, 2010

CLP PO Action

None.

Sampling Issues

None.

Additional Comments

The results for equipment blank sample *MY67A3* and field blank sample *MY67D3*, collected with the samples of this sample delivery group (SDG), on May 5, 2010, are located in SDG MY6768. No qualification of data due to equipment blank or field blank contamination is warranted.

The results for equipment blank sample *MY67A4* and field blank sample *MY67D4*, collected with the samples of this sample delivery group (SDG), on May 6, 2010, are located in SDG MY6789. No qualification of data due to equipment blank or field blank contamination is warranted.

All method requirements specified in the EPA Contract Laboratory Program (CLP) Inorganic Statement of Work (SOW), except as noted, have been met.

Analytical results are listed in Table 1A with qualifications. Definitions of data qualifiers used in Table 1A are provided in Table 1B.

This report was prepared in accordance with the following documents:

- Region 9 Standard Operating Procedure 906, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Inorganic Data Packages*;
- *USEPA Contract Laboratory Program Statement of Work For Inorganic Analysis Multi-Media, Multi-Concentration* ILM05.3, March 2004;
- *ILM05.3 to ILM05.4 Summary of Changes*, December 1, 2006; and
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	Parameter	Acceptable	Comment
1.	Data Completeness	Yes	
2.	Sample Preservation and Holding Times	Yes	
3.	Calibration	Yes	
	a. Initial		
	b. Initial and Continuing Calibration Verification		
	c. CRQL Check Standard (CRI)		
4.	Blanks	Yes	B
5.	ICP Interference Check Sample (ICS)	No	C
6.	Laboratory Control Sample (LCS)	Yes	
7.	Duplicate Sample Analysis	No	D
8.	Matrix Spike Sample Analysis	No	E
9.	ICP Serial Dilution Analysis	No	F
10.	Field Duplicate Sample Analysis	No	G
11.	Sample Quantitation	Yes	A
12.	Overall Assessment	Yes	

III. VALIDITY AND COMMENTS

A. Results above the method detection limit but below the contract required quantitation limit (denoted with an "L" qualifier) are estimated and flagged "J" in Table 1A.

Results above the method detection limit (MDL) but below the contract required quantitation limit (CRQL) are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of quantitation.

B. The following results are reported as non-detected (U) in Table 1A due to low level preparation blank (PBS) contamination.

- Sodium in all samples except MY68J9

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Sodium	PBS	99.6

Sample results less than 5 times the amount in an associated blank that are greater than or equal to the MDL but less than the CRQL are reported as non-detected (U) at the respective CRQL.

A preparation blank is an analytical control that contains distilled, deionized water, or baked sand for solid matrices, and reagents, which is carried through the entire analytical procedure. The preparation blank is used to determine the level of contamination introduced by the laboratory during preparation and analysis.

C. The following results are estimated and flagged "J" in Table 1A because sample concentrations of iron exceed the concentrations in the interelement check sample (ICS).

- Cadmium in all samples
- Selenium and thallium in sample MY68H6

Results for cadmium, selenium, and thallium were reported from undiluted analyses that contained iron at concentrations that exceed 120% of the ICSAB solution concentration. Therefore, the instrument applied interelement correction (IEC) factors may not compensate sufficiently for the interference. The results for cadmium may be biased high and false positives may exist. However, the results for selenium and thallium in sample MY68H6 may be biased low and false negatives may exist.

The ICP ICS solutions A and AB are analyzed to determine the effects of high concentrations of interfering elements on each analyte determined by ICP. Solution A consists of the interferents (Al, Ca, Fe, and Mg), and Solution AB consists of the analytes mixed with the interferents.

D. The following results are estimated and flagged "J" in Table 1A because laboratory duplicate results are outside method QC limits.

- Arsenic, chromium, copper, iron, manganese, and nickel in all samples

Laboratory duplicate results of sample MY68H8D do not meet the ≤ 35 relative percent difference (RPD) for soil criterion for precision as listed below.

Analyte	Laboratory Duplicate, RPD
Arsenic	62
Chromium	54
Copper	39
Iron	36
Manganese	38
Nickel	41

Results for analytes listed above in all samples are considered quantitatively uncertain.

Duplicate analyses demonstrate the analytical precision obtained for each sample matrix. The imprecision between duplicate results may be due to high levels of solids in the sample or poor laboratory technique.

E. The following results are estimated and flagged "J" in Table 1A because a matrix spike recovery result is outside method QC limits.

- Antimony in all samples

The matrix spike recovery result for QC sample MY68H8S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	11	-89

Results above the MDL are considered quantitatively uncertain. Results reported for antimony in all samples may be biased low.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY68H8A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	84

Since the post-digestion spike recovery result was acceptable for antimony, the low pre-digestion spike recovery result may indicate poor laboratory technique or matrix effects which may interfere with accurate analysis.

The matrix spike sample analysis provides information about the effect of the sample matrix on the digestion and measurement methodology.

F. The following results are estimated and flagged "J" in Table 1A because ICP serial dilution results are outside method QC limits.

- Arsenic and potassium in all samples

The percent difference for the ICP serial dilution analysis of sample MY68H8L did not meet the ±10% difference criterion for the analytes shown below.

Analyte	% Difference
Arsenic	+12
Potassium	-13

Results reported for the analytes listed above in all samples are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The arsenic result for the diluted sample was higher than the original. Therefore, the reported arsenic results may be biased low. However, since the potassium result for the diluted sample was lower than the original, the reported potassium results may be biased high.

A five-fold dilution of the laboratory QC sample is performed in association with the ICP procedure to indicate whether interference exists due to sample matrix effects. If the analyte concentration is sufficiently high (minimally a factor of 50 above the MDL in the original sample), the five-fold serial dilution must agree within 10% of the original results after correction for dilution.

G. A comparison of field duplicate pair results indicates the following relative percent difference (RPD) exceeds the 35 RPD laboratory criterion for precision.

Analyte	MY68H8 (D1) mg/kg	MY68H9 (D1) mg/kg	RPD
Arsenic	39.1	23.4	50
Manganese	986	642	42

Analyte	MY68J9 (D2) mg/kg	MY68K0 (D2) mg/kg	RPD
Arsenic	241	111	74
Cadmium	2.7	1.5	57
Lead	275	133	70
Mercury	1.7	0.30	140
Zinc	914	482	62

Since sampling variability is included in the measurement, field duplicate results are expected to vary more than laboratory duplicates. The effect on data quality is not known.

The analysis of field duplicate samples is a measure of both field and analytical precision. The imprecision in the results of the analysis of the field duplicate pair may be due to the sample matrix, high levels of solids in the sample, poor sampling, or laboratory technique.

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

ICF International / Laboratory Data Consultants
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

MEMORANDUM

TO: Monika O'Sullivan, Remedial Project Manager
Arizona and Navajo Site Section, SFD-6-2

THROUGH: Rose Fong, ESAT Task Order Manager (TOM)
Quality Assurance (QA) Program, MTS-3

FROM: Kathleen O'Brien, Data Review Task Manager
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00705009 Amendment 1

DATE: September 9, 2010

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Iron King Mine
Site Account No.:	09 MX QB00
CERCLIS ID No.:	AZ0000309013
Case No.:	40016
SDG No.:	MY69D3
Laboratory:	ALS Laboratory Group (DATAC)
Analysis:	CLP Total Metals and Total Cyanide
Samples:	20 Soils (see Case Summary)
Collection Date:	May 8, 2010
Reviewer:	April Martinez, ESAT/Laboratory Data Consultants (LDC)

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Carol Beard, CLP PO USEPA Region 8
Steve Remaley, CLP PO USEPA Region 9

CLP PO: [X] FYI [ ] Action

SAMPLING ISSUES: [ ] Yes [X] No

Data Validation Report – Tier 3

Case No.: 40016
SDG No.: MY69D3
Site: Iron King Mine
Laboratory: ALS Laboratory Group (DATAC)
Reviewer: April Martinez, ESAT/LDC
Date: September 9, 2010

I. CASE SUMMARY

Sample Information

Samples: MY69D3, MY69D4, MY69D5, MY69D6, MY69D7, MY69D8, MY69D9, MY69E0, MY69E1, MY69E2, MY69E4, MY69E5, MY69E6, MY69E7, MY69E8, MY69E9, MY69F0, MY69F1, MY69F2, and MY69F3

Concentration and Matrix: Low Concentration Soil
Analysis: CLP Total Metals and Total Cyanide
SOW: ILM05.4
Collection Date: May 8, 2010
Sample Receipt Date: May 11, 2010
Preparation Date: May 14, 19, and 24, 2010
Analysis Date: May 17, 20, 25, and 26, 2010

Field QC

Field Blanks (FB): *MY67D6* (See Additional Comments)
Equipment Blanks (EB): *MY67A6* (See Additional Comments)
Background Samples (BG): Not Provided
Field Duplicates (D1): MY69D3 and MY69D4
Field Duplicates (D2): MY69E4 and MY69E5

Laboratory QC

Method Blank & Associated Samples: Preparation Blank-Soil (PBS) and samples listed above
Matrix Spike: MY69D3S
Duplicates: MY69D3D
ICP Serial Dilution: MY69D3L

Analysis: CLP Total Metals and Total Cyanide

Analyte	Sample Preparation and Digestion Date	Analysis Date
ICP-AES Metals	May 19, 2010	May 26, 2010
Mercury	May 24, 2010	May 25, 2010
Cyanide	May 14, 2010	May 17, 2010
Percent Solids	May 19, 2010	May 20, 2010

CLP PO Action

None.

Sampling Issues

None.

Additional Comments

The results for equipment blank sample *MY67A6* and field blank sample *MY67D6*, collected with the samples of this sample delivery group (SDG), are located in SDG MY6789. No qualification of data due to equipment blank or field blank contamination is warranted.

All method requirements specified in the EPA Contract Laboratory Program (CLP) Inorganic Statement of Work (SOW), except as noted, have been met.

Analytical results are listed in Table 1A with qualifications. Definitions of data qualifiers used in Table 1A are provided in Table 1B.

This report was prepared in accordance with the following documents:

- Region 9 Standard Operating Procedure 906, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Inorganic Data Packages*;
- *USEPA Contract Laboratory Program Statement of Work For Inorganic Analysis Multi-Media, Multi-Concentration* ILM05.3, March 2004;
- *ILM05.3 to ILM05.4 Summary of Changes*, December 1, 2006; and
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	Parameter	Acceptable	Comment
1.	Data Completeness	Yes	
2.	Sample Preservation and Holding Times	Yes	
3.	Calibration	Yes	
	a. Initial		
	b. Initial and Continuing Calibration Verification		
	c. CRQL Check Standard (CRI)		
4.	Blanks	Yes	B
5.	ICP Interference Check Sample (ICS)	No	C
6.	Laboratory Control Sample (LCS)	Yes	
7.	Duplicate Sample Analysis	Yes	
8.	Matrix Spike Sample Analysis	No	D
9.	ICP Serial Dilution Analysis	No	E
10.	Field Duplicate Sample Analysis	Yes	
11.	Sample Quantitation	Yes	A
12.	Overall Assessment	Yes	

III. VALIDITY AND COMMENTS

A. Results above the method detection limit but below the contract required quantitation limit (denoted with an "L" qualifier) are estimated and flagged "J" in Table 1A.

Results above the method detection limit (MDL) but below the contract required quantitation limit (CRQL) are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of quantitation.

B. The following results are reported as non-detected (U) in Table 1A due to low level continuing calibration blank (CCB) contamination.

- Silver in samples MY69D3, MY69D4, MY69D6, MY69D7, MY69D8, MY69E1, and MY69E2

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Silver	CCB2	0.038

Sample results less than 5 times the amount in an associated blank that are greater than or equal to the MDL but less than the CRQL are reported as non-detected (U) at the respective CRQL.

A continuing calibration blank (CCB) consists of deionized, distilled water and reagents. It is analyzed after the continuing calibration verification (CCV) standard, at a frequency of every 10 samples and at the end of the analytical run to monitor analyte carry-over.

C. The following results are estimated and flagged "J" or "UJ" in Table 1A because sample concentrations of iron exceed the concentrations in the interelement check sample (ICS).

- Arsenic in all samples
- Thallium in sample MY69E1

Results for arsenic and thallium were reported from undiluted analyses that contained iron at concentrations that exceed 120% of the ICSAB solution concentration. Therefore, the instrument applied interelement correction (IEC) factors may not compensate sufficiently for the interference. The results for arsenic and thallium may be biased low and false negatives may exist.

The ICP ICS solutions A and AB are analyzed to determine the effects of high concentrations of interfering elements on each analyte determined by ICP. Solution A consists of the interferents (Al, Ca, Fe, and Mg), and Solution AB consists of the analytes mixed with the interferents.

D. The following results are estimated and flagged "J" in Table 1A because matrix spike recovery results are outside method QC limits.

- Antimony, arsenic, and selenium in all samples

The matrix spike recovery results for QC sample MY69D3S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	14	-86
Arsenic	142	+42
Selenium	70	-30

Results above the MDL are considered quantitatively uncertain. Results reported for antimony and selenium in all samples may be biased low. However, results reported for arsenic in all samples may be biased high.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY69D3A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	95
Arsenic	93
Selenium	90

Since the post-digestion spike recovery results were acceptable, the unacceptable pre-digestion spike recovery results obtained for analytes listed above may indicate poor laboratory technique or matrix effects which may interfere with accurate analysis.

The matrix spike sample analysis provides information about the effect of the sample matrix on the digestion and measurement methodology.

E. The following results are estimated and flagged "J" in Table 1A because an ICP serial dilution result is outside method QC limits.

- Lead in all samples

The percent difference for the ICP serial dilution analysis of sample MY69D3L did not meet the ±10% difference criterion for the analytes shown below.

Analyte	% Difference
Lead	+11

Results reported for lead in all samples are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The result for the diluted sample was higher than the original. Therefore, the reported sample results may be biased low.

A five-fold dilution of the laboratory QC sample is performed in association with the ICP procedure to indicate whether interference exists due to sample matrix effects. If the analyte concentration is sufficiently high (minimally a factor of 50 above the MDL in the original sample), the five-fold serial dilution must agree within 10% of the original results after correction for dilution.

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

ICF International / Laboratory Data Consultants
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

MEMORANDUM

TO: Monika O'Sullivan, Remedial Project Manager
Arizona and Navajo Site Section, SFD-6-2

THROUGH: Rose Fong, ESAT Task Order Manager (TOM)
Quality Assurance (QA) Program, MTS-3

FROM: Kathleen O'Brien, Data Review Task Manager
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00705009 Amendment 1

DATE: September 8, 2010

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Iron King Mine
Site Account No.:	09 MX QB00
CERCLIS ID No.:	AZ0000309013
Case No.:	40016
SDG No.:	MY69N1
Laboratory:	ALS Laboratory Group (DATAC)
Analysis:	CLP Total Metals and Total Cyanide
Samples:	20 Soils (see Case Summary)
Collection Date:	May 8, 10, and 11, 2010
Reviewer:	April Martinez, ESAT/Laboratory Data Consultants (LDC)

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Carol Beard, CLP PO USEPA Region 8
Steve Remaley, CLP PO USEPA Region 9

CLP PO: [X] FYI [ ] Action

SAMPLING ISSUES: [ ] Yes [X] No

Data Validation Report – Tier 3

Case No.: 40016
SDG No.: MY69N1
Site: Iron King Mine
Laboratory: ALS Laboratory Group (DATAC)
Reviewer: April Martinez, ESAT/LDC
Date: September 8, 2010

I. CASE SUMMARY

Sample Information

Samples: MY69N1, MY69N2, MY69N3, MY69N4, MY69N5, MY69N6, MY69N7, MY69N8, MY69N9, MY69P0, MY69T5, MY69W6, MY69X7, MY69Y8, MY69Z9, MY6A32, MY6A43, MY6A54, MY6A65, and MY6A76

Concentration and Matrix: Low Concentration Soil
Analysis: CLP Total Metals and Total Cyanide
SOW: ILM05.4
Collection Date: May 8, 10, and 11, 2010
Sample Receipt Date: May 11 and 12, 2010
Preparation Date: May 17, 19, 20, and 25, 2010
Analysis Date: May 20, 21, and 27, 2010

Field QC

Field Blanks (FB): *MY67D6, MY67D7,* and *MY67D8* (See Additional Comments)
Equipment Blanks (EB): *MY67A6, MY67A7,* and *MY67A8* (See Additional Comments)
Background Samples (BG): Not Provided
Field Duplicates (D1): MY69N1 and MY69N2

Laboratory QC

Method Blank & Associated Samples: Preparation Blank-Soil (PBS) and samples listed above
Matrix Spike: MY69N1S
Duplicates: MY69N1D
ICP Serial Dilution: MY69N1L

Analysis: CLP Total Metals and Total Cyanide

Analyte	Sample Preparation and Digestion Date	Analysis Date
ICP-AES Metals	May 17, 2010	May 27, 2010
Mercury	May 25, 2010	May 27, 2010
Cyanide	May 19, 2010	May 20, 2010
Percent Solids	May 20, 2010	May 21, 2010

CLP PO Action

None.

Sampling Issues

None.

Additional Comments

The results for equipment blank sample *MY67A6* and field blank sample *MY67D6*, collected with the samples of this sample delivery group (SDG), are located in SDG MY6789. No qualification of data due to equipment blank or field blank contamination is warranted.

The results for equipment blank sample *MY67A7* and field blank sample *MY67D7*, collected with the samples of this sample delivery group (SDG), are located in SDG MY6783. No qualification of data due to equipment blank or field blank contamination is warranted.

The results for equipment blank sample *MY67A8* and field blank sample *MY67D8*, collected with the samples of this sample delivery group (SDG), are located in SDG MY6777. No qualification of data due to equipment blank or field blank contamination is warranted.

All method requirements specified in the EPA Contract Laboratory Program (CLP) Inorganic Statement of Work (SOW), except as noted, have been met.

Analytical results are listed in Table 1A with qualifications. Definitions of data qualifiers used in Table 1A are provided in Table 1B.

This report was prepared in accordance with the following documents:

- Region 9 Standard Operating Procedure 906, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Inorganic Data Packages*;
- *USEPA Contract Laboratory Program Statement of Work For Inorganic Analysis Multi-Media, Multi-Concentration* ILM05.3, March 2004;
- *ILM05.3 to ILM05.4 Summary of Changes*, December 1, 2006; and
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	Parameter	Acceptable	Comment
1.	Data Completeness	Yes	
2.	Sample Preservation and Holding Times	Yes	
3.	Calibration	Yes	
	a. Initial		
	b. Initial and Continuing Calibration Verification		
	c. CRQL Check Standard (CRI)		
4.	Blanks	Yes	B
5.	ICP Interference Check Sample (ICS)	Yes	
6.	Laboratory Control Sample (LCS)	Yes	
7.	Duplicate Sample Analysis	Yes	
8.	Matrix Spike Sample Analysis	No	C
9.	ICP Serial Dilution Analysis	No	D
10.	Field Duplicate Sample Analysis	Yes	
11.	Sample Quantitation	Yes	A
12.	Overall Assessment	Yes	

III. VALIDITY AND COMMENTS

A. Results above the method detection limit but below the contract required quantitation limit (denoted with an "L" qualifier) are estimated and flagged "J" in Table 1A.

Results above the method detection limit (MDL) but below the contract required quantitation limit (CRQL) are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of quantitation.

B. The following results are reported as non-detected (U) in Table 1A due to low level preparation blank (PBS) or continuing calibration blank (CCB) contamination.

- Cadmium in samples MY69N1 through MY69N9 and MY69W6
- Silver in samples MY69N1, MY69N3, MY69N4, MY69N8, MY69T5, MY69W6, MY69X7, MY69Y8, MY69Z9, and MY6A43

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Cadmium	CCB2 and CCB3	0.028 and 0.051
Silver	PBS and CCB3	0.039 and 0.044

Sample results less than 5 times the amount in an associated blank that are greater than or equal to the MDL but less than the CRQL are reported as non-detected (U) at the respective CRQL.

A preparation blank is an analytical control that contains distilled, deionized water, or baked sand for solid matrices, and reagents, which is carried through the entire analytical procedure. The preparation blank is used to determine the level of contamination introduced by the laboratory during preparation and analysis.

A continuing calibration blank (CCB) consists of deionized, distilled water and reagents. It is analyzed after the continuing calibration verification (CCV) standard, at a frequency of every 10 samples and at the end of the analytical run to monitor analyte carry-over.

C. The following results are estimated and flagged "J" in Table 1A because matrix spike recovery results are outside method QC limits.

- Antimony, arsenic, copper, and lead in all samples

The matrix spike recovery results for QC sample MY69N1S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	29	-71
Arsenic	139	+39
Copper	131	+31
Lead	145	+45

Results above the MDL are considered quantitatively uncertain. Results reported for antimony in all samples may be biased low. However, results reported for arsenic, copper, and lead in all samples may be biased high.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY69N1A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	93
Arsenic	85
Copper	87
Lead	77

Since the post-digestion spike recovery results were acceptable, the unacceptable pre-digestion spike recovery results obtained for analytes listed above may indicate poor laboratory technique or matrix effects which may interfere with accurate analysis.

The matrix spike sample analysis provides information about the effect of the sample matrix on the digestion and measurement methodology.

D. The following results are estimated and flagged "J" in Table 1A because ICP serial dilution results are outside method QC limits.

- Nickel and zinc in all samples

The percent difference for the ICP serial dilution analysis of sample MY69N1L did not meet the ±10% difference criterion for the analytes shown below.

Analyte	% Difference
Nickel	+17
Zinc	+14

Results reported for analytes listed above in all samples are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The results for the diluted sample were higher than the original. Therefore, the reported sample results may be biased low.

A five-fold dilution of the laboratory QC sample is performed in association with the ICP procedure to indicate whether interference exists due to sample matrix effects. If the analyte concentration is sufficiently high (minimally a factor of 50 above the MDL in the original sample), the five-fold serial dilution must agree within 10% of the original results after correction for dilution.

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

ICF International / Laboratory Data Consultants
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

MEMORANDUM

TO: Monika O'Sullivan, Remedial Project Manager
Arizona and Navajo Site Section, SFD-6-2

THROUGH: Rose Fong, ESAT Task Order Manager (TOM)
Quality Assurance (QA) Program, MTS-3

FROM: Doug Lindelof, Data Review Task Manager
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00705009 Amendment 1

DATE: August 24, 2010

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Iron King Mine
Site Account No.:	09 MX QB00
CERCLIS ID No.:	AZ0000309013
Case No.:	40016
SDG No.:	MY69S5
Laboratory:	ALS Laboratory Group (DATAC)
Analysis:	CLP Total Metals plus Total Cyanide
Samples:	20 Soils (see Case Summary)
Collection Date:	May 11, 2010
Reviewer:	Calvin Tanaka, ESAT/Laboratory Data Consultants (LDC)

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Carol Beard, CLP PO USEPA Region 8
Steve Remaley, CLP PO USEPA Region 9

CLP PO: [X] FYI [ ] Action

SAMPLING ISSUES: [ ] Yes [X] No

Data Validation Report – Tier 3

Case No.: 40016
SDG No.: MY69S5
Site: Iron King Mine
Laboratory: ALS Laboratory Group (DATAC)
Reviewer: Calvin Tanaka, ESAT/LDC
Date: August 24, 2010

I. CASE SUMMARY

Sample Information

Samples: MY69S5, MY69S6, MY69S7, MY69S8, MY69S9, MY69T0, MY69T1, MY69T2, MY69T3, MY69T4, MY69T6, MY69T7, MY69T8, MY69T9, MY69W0, MY69W1, MY69W2, MY69W3, MY69W4, and MY69W5

Concentration and Matrix: Low Concentration Soil
Analysis: CLP Total Metals and Total Cyanide
SOW: ILM05.4
Collection Date: May 11, 2010
Sample Receipt Date: May 12, 2010
Preparation Date: May 13, and 15, 2010
Analysis Date: May 14, 17, and 24, 2010

Field QC

Field Blanks (FB): MY67D8 (See Additional Comments)
Equipment Blanks (EB): MY67A8 (See Additional Comments)
Background Samples (BG): Not Provided
Field Duplicates (D1): MY69S5 and MY69S6
Field Duplicates (D2): MY69T6 and MY69T7

Laboratory QC

Method Blank & Associated Samples: Preparation Blank-Water (PBW) and samples listed above
Matrix Spike: MY69S5S
Duplicates: MY69S5D
ICP Serial Dilution: MY69S5L

Analysis: CLP Total Metals and Total Cyanide

Analyte	Sample Preparation and Digestion Date	Analysis Date
ICP-AES Metals	May 13, 2010	May 24, 2010
Mercury	May 13, 2010	May 14, 2010
Cyanide	May 15, 2010	May 17, 2010
Percent Solids	May 13, 2010	May 14, 2010

CLP PO Action

None.

Sampling Issues

None.

Additional Comments

The results for equipment blank sample MY67A8 and field blank sample MY67D8, collected with the samples of this sample delivery group (SDG), are located in SDG MY6777. No qualification of data due to equipment blank or field blank contamination is warranted.

All method requirements specified in the EPA Contract Laboratory Program (CLP) Inorganic Statement of Work (SOW), except as noted, have been met.

Analytical results are listed in Table 1A with qualifications. Definitions of data qualifiers used in Table 1A are provided in Table 1B.

This report was prepared in accordance with the following documents:

- Region 9 Standard Operating Procedure 906, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Inorganic Data Packages*;
- *USEPA Contract Laboratory Program Statement of Work For Inorganic Analysis Multi-Media, Multi-Concentration* ILM05.3, March 2004;
- *ILM05.3 to ILM05.4 Summary of Changes*, December 1, 2006; and
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	Parameter	Acceptable	Comment
1.	Data Completeness	Yes	
2.	Sample Preservation and Holding Times	Yes	
3.	Calibration	Yes	
	a. Initial		
	b. Initial and Continuing Calibration Verification		
	c. CRQL Check Standard (CRI)		
4.	Blanks	Yes	B
5.	ICP Interference Check Sample (ICS)	No	C
6.	Laboratory Control Sample (LCS)	Yes	
7.	Duplicate Sample Analysis	No	D
8.	Matrix Spike Sample Analysis	No	E
9.	ICP Serial Dilution Analysis	Yes	
10.	Field Duplicate Sample Analysis	No	F
11.	Sample Quantitation	Yes	A
12.	Overall Assessment	Yes	

III. VALIDITY AND COMMENTS

A. Results above the method detection limit but below the contract required quantitation limit (denoted with an "L" qualifier) are estimated and flagged "J" in Table 1A.

Results above the method detection limit (MDL) but below the contract required quantitation limit (CRQL) are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of quantitation.

B. The following results are reported as non-detected (U) in Table 1A due to low level preparation blank (PBW) or continuing calibration blank (CCB) contamination.

- Antimony in samples MY69S8 and MY69W5
- Mercury in samples MY69S6, MY69S7, MY69S8, MY69S9, MY69T9, and MY69W0 through MY69W5

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Antimony	PBW	0.21
Mercury	CCB1 and CCB4	0.014 and 0.019

Sample results less than 5 times the amount in an associated blank that are greater than or equal to the MDL but less than the CRQL are reported as non-detected (U) at the respective CRQL.

A preparation blank is an analytical control that contains distilled, deionized water, or baked sand for solid matrices, and reagents, which is carried through the entire analytical procedure. The preparation blank is used to determine the level of contamination introduced by the laboratory during preparation and analysis.

A continuing calibration blank (CCB) consists of deionized, distilled water and reagents. It is analyzed after the continuing calibration verification (CCV) standard, at a frequency of every 10 samples and at the end of the analytical run to monitor analyte carry-over.

C. The following results are estimated and flagged "J" in Table 1A because sample concentrations of iron exceed the concentrations in the interelement check sample (ICS).

- Arsenic in all samples

Results for arsenic were reported from undiluted analyses that contained iron at concentrations that exceed 120% of the ICSAB solution concentration. Therefore, the instrument applied interelement correction (IEC) factors may not compensate sufficiently for the interference. The results for arsenic may be biased low.

The ICP ICS solutions A and AB are analyzed to determine the effects of high concentrations of interfering elements on each analyte determined by ICP. Solution A consists of the interferents (Al, Ca, Fe, and Mg), and Solution AB consists of the analytes mixed with the interferents.

D. The following results are estimated and flagged "J" in Table 1A because laboratory duplicate results are outside method QC limits.

- Aluminum, barium, calcium, chromium, copper, lead, potassium, and zinc in all samples

Laboratory duplicate results of sample MY69S5D do not meet the ≤ 35 relative percent difference (RPD) for soil criterion for precision as listed below.

Analyte	Laboratory Duplicate, RPD
Aluminum	37
Barium	47
Calcium	65
Chromium	48
Copper	59
Lead	42
Potassium	36
Zinc	39

Results for analytes listed above in all samples are considered quantitatively uncertain.

Duplicate analyses demonstrate the analytical precision obtained for each sample matrix. The imprecision between duplicate results may be due to high levels of solids in the sample or poor laboratory technique.

E. The following results are estimated and flagged "J" in Table 1A because matrix spike recovery results are outside method QC limits.

- Antimony, arsenic, copper, and zinc in all samples

The matrix spike recovery results for QC sample MY69S5S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	28	-72
Arsenic	67	-33
Copper	54	-46
Zinc	63	-37

Results above the MDL are considered quantitatively uncertain. Results reported for analytes listed above in all samples may be biased low.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY69S5A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	95
Arsenic	93
Copper	101
Zinc	88

Since the post-digestion spike recovery results were acceptable, the low pre-digestion spike recovery results obtained for analytes listed above may indicate poor laboratory technique or matrix effects which may interfere with accurate analysis by suppressing the analytical result.

The matrix spike sample analysis provides information about the effect of the sample matrix on the digestion and measurement methodology.

F. A comparison of field duplicate pair results indicates the following relative percent differences (RPDs) exceed the 35 RPD laboratory criterion for precision.

Analyte	MY69S5 (D1) mg/kg	MY69S6 (D1) mg/kg	RPD
Calcium	21300	32300	41

Analyte	MY69T6 (D2) mg/kg	MY69T7 (D2) mg/kg	RPD
Copper	187	72.2	89

Since sampling variability is included in the measurement, field duplicate results are expected to vary more than laboratory duplicates. The effect on data quality is not known.

The analysis of field duplicate samples is a measure of both field and analytical precision. The imprecision in the results of the analysis of the field duplicate pair may be due to the sample matrix, high levels of solids in the sample, poor sampling, or laboratory technique.

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

ICF International / Laboratory Data Consultants
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

MEMORANDUM

TO: Monika O'Sullivan, Remedial Project Manager
Arizona and Navajo Site Section, SFD-6-2

THROUGH: Rose Fong, ESAT Task Order Manager (TOM)
Quality Assurance (QA) Program, MTS-3

FROM: Kathleen O'Brien, Data Review Task Manager
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00705009 Amendment 1

DATE: September 14, 2010

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Iron King Mine
Site Account No.:	09 MX QB00
CERCLIS ID No.:	AZ0000309013
Case No.:	40016
SDG No.:	MY6AD9
Laboratory:	Bonner Analytical Testing Company (BONNER)
Analysis:	CLP Total Metals and Total Cyanide
Samples:	20 Soils (see Case Summary)
Collection Date:	May 11, 2010
Reviewer:	Calvin Tanaka, ESAT/Laboratory Data Consultants (LDC)

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Cynthia Gurley, CLP PO USEPA Region 4
Steve Remaley, CLP PO USEPA Region 9

CLP PO: [X] FYI [ ] Action

SAMPLING ISSUES: [ ] Yes [X] No

Data Validation Report – Tier 3

Case No.: 40016
SDG No.: MY6AD9
Site: Iron King Mine
Laboratory: Bonner Analytical Testing Company (BONNER)
Reviewer: Calvin Tanaka, ESAT/LDC
Date: September 14, 2010

I. CASE SUMMARY

Sample Information

Samples: MY6AD9, MY6AE0, MY6AE1, MY6AE2, MY6AE3, MY6AE4, MY6AE5, MY6AE6, MY6AE7, MY6AE8, MY6AE9, MY6AF0, MY6AF1, MY6AF2, MY6AF3, MY6AF4, MY6AF5, MY6AF6, MY6AF7, and MY6AF8

Concentration and Matrix: Low Concentration Soil
Analysis: CLP Total Metals and Total Cyanide
SOW: ILM05.4
Collection Date: May 11, 2010
Sample Receipt Date: May 13, 2010
Preparation Date: May 14, 2010
Analysis Date: May 14, 15, 17, and 19, 2010

Field QC

Field Blanks (FB): Not Provided
Equipment Blanks (EB): Not Provided
Background Samples (BG): Not Provided
Field Duplicates (D1): MY6AE3 and MY6AE4
Field Duplicates (D2): MY6AF4 and MY6AF5

Laboratory QC

Method Blank & Associated Samples: Preparation Blank-Soil (PBS) and samples listed above
Matrix Spike: MY6AE3S
Duplicates: MY6AE3D
ICP Serial Dilution: MY6AE3L

Analysis: CLP Total Metals and Total Cyanide

Analyte	Sample Preparation and Digestion Date	Analysis Date
ICP-AES Metals	May 14, 2010	May 19, 2010
Mercury	May 14, 2010	May 17, 2010
Cyanide	May 14, 2010	May 14, 2010
Percent Solids	May 14, 2010	May 15, 2010

CLP PO Action

None.

Sampling Issues

None.

Additional Comments

The initial Form 1A results for samples MY6AE2 and MY6AE3 were calculated using incorrect percent solids values. Corrected Form 1As for samples MY6AE2 and MY6AE3 were received September 14, 2010 from the laboratory. Refer to the attached Communication Record Log (CRL) for details. The results for samples MY6AE2 and MY6AE3 reported on the Table 1A were modified by ESAT to reflect the corrected laboratory data.

All method requirements specified in the EPA Contract Laboratory Program (CLP) Inorganic Statement of Work (SOW), except as noted, have been met.

Analytical results are listed in Table 1A with qualifications. Definitions of data qualifiers used in Table 1A are provided in Table 1B.

This report was prepared in accordance with the following documents:

- Region 9 Standard Operating Procedure 906, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Inorganic Data Packages*;
- *USEPA Contract Laboratory Program Statement of Work For Inorganic Analysis Multi-Media, Multi-Concentration* ILM05.3, March 2004;
- *ILM05.3 to ILM05.4 Summary of Changes*, December 1, 2006; and
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	Parameter	Acceptable	Comment
1.	Data Completeness	Yes	
2.	Sample Preservation and Holding Times	Yes	
3.	Calibration	Yes	
	a. Initial		
	b. Initial and Continuing Calibration Verification		
	c. CRQL Check Standard (CRI)		
4.	Blanks	Yes	B
5.	ICP Interference Check Sample (ICS)	No	C
6.	Laboratory Control Sample (LCS)	Yes	
7.	Duplicate Sample Analysis	Yes	
8.	Matrix Spike Sample Analysis	No	D
9.	ICP Serial Dilution Analysis	No	E
10.	Field Duplicate Sample Analysis	No	F
11.	Sample Quantitation	Yes	A
12.	Overall Assessment	Yes	

III. VALIDITY AND COMMENTS

A. Results above the method detection limit but below the contract required quantitation limit (denoted with an "L" qualifier) are estimated and flagged "J" in Table 1A.

Results above the method detection limit (MDL) but below the contract required quantitation limit (CRQL) are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of quantitation.

B. The following results are reported as non-detected (U) in Table 1A due to low level preparation blank (PBW) contamination.

- Cyanide in all samples

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Cyanide	PBW	0.21

Sample results less than 5 times the amount in an associated blank that are greater than or equal to the MDL but less than the CRQL are reported as non-detected (U) at the respective CRQL.

A preparation blank is an analytical control that contains distilled, deionized water, or baked sand for solid matrices, and reagents, which is carried through the entire analytical procedure. The preparation blank is used to determine the level of contamination introduced by the laboratory during preparation and analysis.

C. The following results are estimated and flagged "UJ" in Table 1A because sample concentrations of iron exceed the concentrations in the interelement check sample (ICS).

- Selenium in samples MY6AD9, MY6AF7, and MY6AF8
- Silver in all samples

Results for the analytes listed above were reported from undiluted analyses that contained iron at concentrations that exceed 120% of the ICSAB solution concentration. Therefore, the instrument applied interelement correction (IEC) factors may not compensate sufficiently for the interference. The results for selenium and silver may be biased low and false negatives may exist.

The ICP ICS solutions A and AB are analyzed to determine the effects of high concentrations of interfering elements on each analyte determined by ICP. Solution A consists of the interferents (Al, Ca, Fe, and Mg), and Solution AB consists of the analytes mixed with the interferents.

D. The following results are estimated and flagged "J" or "UJ" in Table 1A because matrix spike recovery results are outside method QC limits.

- Antimony and selenium in all samples

The matrix spike recovery results for QC sample MY6AE3S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	16	-84
Selenium	73	-37

Results above the MDL are considered quantitatively uncertain. Results reported for antimony and selenium in all samples may be biased low.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY6AE3A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	95
Selenium	74

Since the antimony post-digestion spike recovery result was acceptable, the low pre-digestion spike recovery result may indicate poor laboratory technique or matrix effects which may interfere with accurate analysis.

However, since the post-digestion spike recovery result was not acceptable for selenium, the low pre-digestion spike recovery result may indicate poor laboratory technique or matrix effects which may interfere with accurate analysis by suppressing the analytical result.

The matrix spike sample analysis provides information about the effect of the sample matrix on the digestion and measurement methodology.

E. The following results are estimated and flagged "J" in Table 1A because ICP serial dilution results are outside method QC limits.

- Aluminum, arsenic, barium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel, potassium, vanadium, and zinc in all samples

The percent difference for the ICP serial dilution analysis of sample MY6AE3L did not meet the ±10% difference criterion for the analytes shown below.

Analyte	% Difference
Aluminum	-30
Arsenic	-36
Barium	-30
Cadmium	-38
Calcium	-29
Chromium	-34
Cobalt	-34
Copper	-38
Iron	-27
Lead	-33
Magnesium	-28
Manganese	-29
Nickel	-35
Potassium	-29
Vanadium	-39
Zinc	-33

Results reported for analytes listed above in all samples are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The results for the diluted sample were lower than the original. Therefore, the reported sample results may be biased high.

A five-fold dilution of the laboratory QC sample is performed in association with the ICP procedure to indicate whether interference exists due to sample matrix effects. If the analyte concentration is sufficiently high (minimally a factor of 50 above the MDL in the original sample), the five-fold serial dilution must agree within 10% of the original results after correction for dilution.

F. A comparison of field duplicate pair results indicates the following relative percent difference (RPD) exceeds the 35 RPD laboratory criterion for precision.

Analyte	MY6AF4 (D2) mg/kg	MY6AF5 (D2) mg/kg	RPD
Lead	35.5	69.8	65

In addition, an absolute difference of 0.26 mg/kg was obtained for mercury in the analysis of field duplicate pair samples MY6AF4 and MY6AF5 and exceeds the ± 2 times the CRQL absolute difference criterion for precision.

Since sampling variability is included in the measurement, field duplicate results are expected to vary more than laboratory duplicates. The effect on data quality is not known.

The analysis of field duplicate samples is a measure of both field and analytical precision. The imprecision in the results of the analysis of the field duplicate pair may be due to the sample matrix, high levels of solids in the sample, poor sampling, or laboratory technique.

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

In Reference to
Case: 40016 SDG No.: MY6AD9

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM

Communication Record Log

Date of Call: August 31, 2010

Laboratory Name: Bonner Analytical Testing Co. (BONNER)

Lab Contact: Chris Bonner or Brandon Beck

Region: 9

Regional Contact: Steve Remaley, CLP PO

ESAT Reviewer: Stan Kott, ESAT/LDC

Call Initiated By: ___ Laboratory X Region

In reference to data for the following samples: MY6AE2 and MY6AE3

Summary of Questions/issues Discussed:

The following items were noted during the review of this sample delivery group (SDG) data package. Please respond within 4 days as specified in ILM05.4 Statement of Work (SOW), Exhibit B, Section 2, 2.2. Send response and resubmissions to:

ICF International/Laboratory Data Consultants, Inc.,
Environmental Services Assistance Team, USEPA Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804, FAX 510 412-2304.

SDG: MY6AD9

1. For sample MY6AE2, Form 1A, Inorganic Analysis Data Sheet (pages 18), indicates a percent solids of 98.7; however, the Total Solids spreadsheet (page 161) indicates percent solids of 99.7.

   For sample MY6AE3, Form 1A (page 19), indicates a percent solids of 99.7; however, the Total Solids spreadsheet (page 161) indicates percent solids of 98.7.

   Please review the percent solids and analyte concentration data for samples MY6AE2 and MY6AE3 and confirm the reported result concentrations. Please provide corrected Form 1A's for samples MY6AE2 and MY6AE3.

Summary of Resolution: The response from the laboratory, received September 14, 2010, was satisfactory.

ICF International / Laboratory Data Consultants
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

MEMORANDUM

TO: Monika O'Sullivan, Remedial Project Manager
Arizona and Navajo Site Section, SFD-6-2

THROUGH: Rose Fong, ESAT Task Order Manager (TOM)
Quality Assurance (QA) Program, MTS-3

FROM: Kathleen O'Brien, Data Review Task Manager
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00705009 Amendment 1

DATE: September 9, 2010

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Iron King Mine
Site Account No.:	09 MX QB00
CERCLIS ID No.:	AZ0000309013
Case No.:	40016
SDG No.:	MY6AQ0
Laboratory:	Bonner Analytical Testing Company (BONNER)
Analysis:	CLP Total Metals and Total Cyanide
Samples:	20 Soils (see Case Summary)
Collection Date:	May 12, 2010
Reviewer:	Kendra DeSantolo, ESAT/Laboratory Data Consultants (LDC)

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Cynthia Gurley, CLP PO USEPA Region 4
Steve Remaley, CLP PO USEPA Region 9

CLP PO: [X] FYI [ ] Action

SAMPLING ISSUES: [ ] Yes [X] No

Data Validation Report – Tier 3

Case No.: 40016
SDG No.: MY6AQ0
Site: Iron King Mine
Laboratory: Bonner Analytical Testing Company (BONNER)
Reviewer: Kendra DeSantolo, ESAT/LDC
Date: September 9, 2010

I. CASE SUMMARY

Sample Information

Samples: MY6AQ0, MY6AQ1, MY6AQ2, MY6AQ3, MY6AQ4, MY6AQ5, MY6AQ6, MY6AQ7, MY6AQ8, MY6AQ9, MY6AR0, MY6AR1, MY6AR2, MY6AR3, MY6AR4, MY6AR5, MY6AR6, MY6AR7, MY6AR8, and MY6AR9

Concentration and Matrix: Low Concentration Soil
Analysis: CLP Total Metals and Total Cyanide
SOW: ILM05.4
Collection Date: May 12, 2010
Sample Receipt Date: May 14, 2010
Preparation Date: May 17 and 18, 2010
Analysis Date: May 17, 18, and 19, 2010

Field QC

Field Blanks (FB): Not Provided
Equipment Blanks (EB): Not Provided
Background Samples (BG): Not Provided
Field Duplicates (D1): MY6AQ2 and MY6AQ3
Field Duplicates (D2): MY6AR3 and MY6AR4

Laboratory QC

Method Blank & Associated Samples: Preparation Blank-Soil (PBS) and samples listed above
Matrix Spike: MY6AQ2S
Duplicates: MY6AQ2D
ICP Serial Dilution: MY6AQ2L

Analysis: CLP Total Metals and Total Cyanide

Analyte	Sample Preparation and Digestion Date	Analysis Date
ICP-AES Metals	May 17, 2010	May 17 and 19, 2010
Mercury	May 17, 2010	May 18, 2010
Cyanide	May 17, 2010	May 17, 2010
Percent Solids	May 17, 2010	May 18, 2010

CLP PO Action

None.

Sampling Issues

None.

Additional Comments

The following sample was diluted and re-analyzed due to high analyte concentrations that exceed the instrument's linear range.

Sample	Dilution	Analyte
MY6AR6	3-fold	Iron and Manganese

The laboratory Total Solids spreadsheet has an incorrect analysis start date. A corrected spreadsheet was requested from the laboratory but has not been received to date. Data quality is not likely to be affected and this report is considered final. Refer to the attached Communication Record Log (CRL) for details.

All method requirements specified in the EPA Contract Laboratory Program (CLP) Inorganic Statement of Work (SOW), except as noted, have been met.

Analytical results are listed in Table 1A with qualifications. Definitions of data qualifiers used in Table 1A are provided in Table 1B.

This report was prepared in accordance with the following documents:

- Region 9 Standard Operating Procedure 906, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Inorganic Data Packages*;
- *USEPA Contract Laboratory Program Statement of Work For Inorganic Analysis Multi-Media, Multi-Concentration* ILM05.3, March 2004;
- *ILM05.3 to ILM05.4 Summary of Changes*, December 1, 2006; and
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	Parameter	Acceptable	Comment
1.	Data Completeness	Yes	
2.	Sample Preservation and Holding Times	Yes	
3.	Calibration	Yes	
	a. Initial		
	b. Initial and Continuing Calibration Verification		
	c. CRQL Check Standard (CRI)		
4.	Blanks	Yes	B
5.	ICP Interference Check Sample (ICS)	No	C
6.	Laboratory Control Sample (LCS)	Yes	
7.	Duplicate Sample Analysis	Yes	
8.	Matrix Spike Sample Analysis	No	D
9.	ICP Serial Dilution Analysis	No	E
10.	Field Duplicate Sample Analysis	No	F
11.	Sample Quantitation	Yes	A
12.	Overall Assessment	Yes	

III. VALIDITY AND COMMENTS

A. Results above the method detection limit but below the contract required quantitation limit (denoted with an "L" qualifier) are estimated and flagged "J" in Table 1A.

Results above the method detection limit (MDL) but below the contract required quantitation limit (CRQL) are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of quantitation.

B. The following results are reported as non-detected (U) in Table 1A due to low level continuing calibration blank (CCB) contamination.

- Cadmium in samples MY6AQ1, MY6AQ6, MY6AR1, MY6AR3 through MY6AR5, and MY6AR9
- Sodium in samples MY6AQ0, MY6AQ1, and MY6AR3 through MY6AR5

Analyte amounts greater than the MDL but less than the CRQL were found in the following blanks at the concentrations listed below.

Analyte	Blank	Concentration, mg/kg
Cadmium	CCB2 and CCB4	0.044 and 0.048
Sodium	CCB2 and CCB3	13.0 and 13.7

Sample results less than 5 times the amount in an associated blank that are greater than or equal to the MDL but less than the CRQL are reported as non-detected (U) at the respective CRQL.

A continuing calibration blank (CCB) consists of deionized, distilled water and reagents. It is analyzed after the continuing calibration verification (CCV) standard, at a frequency of every 10 samples and at the end of the analytical run to monitor analyte carry-over.

C. The following results are estimated and flagged "UJ" in Table 1A because sample concentrations of iron exceed the concentrations in the interelement check sample (ICS).

- Selenium in samples MY6AQ0 through MY6AQ3, MY6AQ5 and MY6AR6
- Silver in all samples

Results for the analytes listed above were reported from undiluted analyses that contained iron at concentrations that exceed 120% of the ICSAB solution concentration. Therefore, the instrument applied interelement correction (IEC) factors may not compensate sufficiently for the interference. The results for selenium and silver may be biased low and false negatives may exist.

The ICP ICS solutions A and AB are analyzed to determine the effects of high concentrations of interfering elements on each analyte determined by ICP. Solution A consists of the interferents (Al, Ca, Fe, and Mg), and Solution AB consists of the analytes mixed with the interferents.

D. The following results are estimated and flagged "J+" or "UJ" in Table 1A because matrix spike recovery results are outside method QC limits.

- Antimony, arsenic, and selenium in all samples

The matrix spike recovery results for QC sample MY6AQ2S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	9	-91
Arsenic	726	+626
Selenium	56	-44

Results above the MDL are considered quantitatively uncertain. Results reported for antimony and selenium in all samples may be biased low. However, results for arsenic may be biased high.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY6AQ2A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	100
Arsenic	127
Selenium	60

Since the post-digestion spike recovery result was acceptable for antimony, the low pre-digestion spike recovery results may indicate poor laboratory technique or matrix effects which may interfere with accurate analysis. However, since both the post- and pre-digestion spikes did not meet the QC criteria for arsenic and selenium, matrix effects may be present in the sample digestate which may affect the analyte signal during analysis.

The matrix spike sample analysis provides information about the effect of the sample matrix on the digestion and measurement methodology.

E. The following results are estimated and flagged "J" in Table 1A because ICP serial dilution results are outside method QC limits.

- Aluminum, arsenic, barium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel, potassium, sodium, vanadium, and zinc in all samples

The percent difference for the ICP serial dilution analysis of sample MY6AC1L did not meet the ±10% difference criterion for the analytes shown below.

Analyte	% Difference
Aluminum	-24
Arsenic	-95
Barium	-24
Calcium	-22
Chromium	-100
Cobalt	-100
Copper	-97
Iron	-18
Lead	-100
Magnesium	-22
Manganese	-22
Nickel	-98
Potassium	-21
Sodium	+55
Vanadium	-23
Zinc	-100

Results reported for analytes listed above in all samples are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The sodium result for the diluted sample was higher than the original. Therefore, the reported sodium results may be biased low. However, since the aluminum, arsenic, barium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel, potassium, vanadium, and zinc results for the diluted sample were lower than the original, the reported sample results may be biased high.

A five-fold dilution of the laboratory QC sample is performed in association with the ICP procedure to indicate whether interference exists due to sample matrix effects. If the analyte concentration is sufficiently high (minimally a factor of 50 above the MDL in the original sample), the five-fold serial dilution must agree within 10% of the original results after correction for dilution.

F. A comparison of field duplicate pair results indicates the following relative percent difference (RPD) exceeds the 35 RPD laboratory criterion for precision.

Analyte	MY6AR3 (D2) mg/kg	MY6AR4 (D2) mg/kg	RPD
Lead	22.4	15.3	38

Since sampling variability is included in the measurement, field duplicate results are expected to vary more than laboratory duplicates. The effect on data quality is not known.

The analysis of field duplicate samples is a measure of both field and analytical precision. The imprecision in the results of the analysis of the field duplicate pair may be due to the sample matrix, high levels of solids in the sample, poor sampling, or laboratory technique.

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

In Reference to
Case: 40016 SDG No.: MY6AQ0

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM

Communication Record Log

Date of Call: September 9, 2010

Laboratory Name: Bonner Analytical Testing Co. (BONNER)

Lab Contact: Chris Bonner or Brandon Beck

Region: 9

Regional Contact: Steve Remaley, CLP PO

ESAT Reviewer: Stan Kott, ESAT/LDC

Call Initiated By: ____ Laboratory __X__ Region

In reference to data for the following samples: All Total Solids

Summary of Questions/issues Discussed:

The following items were noted during the review of this sample delivery group (SDG) data package. Please respond within 4 days as specified in ILM05.4 Statement of Work (SOW), Exhibit B, Section 2, 2.2. Send response and resubmissions to:

ICF International/Laboratory Data Consultants, Inc.,
Environmental Services Assistance Team, USEPA Region 9 Laboratory
1337 S. 46th Street, Building 201, Richmond, CA 94804.

SDG: MY6AQ0

1. The laboratory Total Solids spreadsheet (page 182) indicates a start date of "5/1712".

   Please review the percent solids data for SDG MY6AQ0 and confirm the analysis start date. Please provide corrected Total Solids spreadsheet for SDG MY6AQ0.

ICF International / Laboratory Data Consultants
Environmental Services Assistance Team, Region 9
1337 South 46th Street, Building 201, Richmond, CA 94804-4698
Phone: (510) 412-2300 Fax: (510) 412-2304

MEMORANDUM

TO: Monika O'Sullivan, Remedial Project Manager
Arizona and Navajo Site Section, SFD-6-2

THROUGH: Rose Fong, ESAT Task Order Manager (TOM)
Quality Assurance (QA) Program, MTS-3

FROM: Kathleen O'Brien, Data Review Task Manager
Region 9 Environmental Services Assistance Team (ESAT)

ESAT Contract No.: EP-W-06-041
Technical Direction Form No.: 00705009 Amendment 1

DATE: August 31, 2010

SUBJECT: Review of Analytical Data, Tier 3

Attached are comments resulting from ESAT Region 9 review of the following analytical data:

Site:	Iron King Mine
Site Account No.:	09 MX QB00
CERCLIS ID No.:	AZ0000309013
Case No.:	40016
SDG No.:	MY6B40
Laboratory:	Bonner Analytical Testing Company (BONNER)
Analysis:	CLP Total Metals and Total Cyanide
Samples:	20 Soils (see Case Summary)
Collection Date:	May 12 and 13, 2010
Reviewer:	Calvin Tanaka, ESAT/Laboratory Data Consultants (LDC)

This report has been reviewed by the EPA TOM for the ESAT contract, whose signature appears above.

If there are any questions, please contact Rose Fong (QA Program/EPA) at (415) 972-3812.

Attachment

cc: Cynthia Gurley, CLP PO USEPA Region 4
Steve Remaley, CLP PO USEPA Region 9

CLP PO: [X] FYI [ ] Action

SAMPLING ISSUES: [ ] Yes [X] No

Data Validation Report – Tier 3

Case No.: 40016
SDG No.: MY6B40
Site: Iron King Mine
Laboratory: Bonner Analytical Testing Company (BONNER)
Reviewer: Calvin Tanaka, ESAT/LDC
Date: August 31, 2010

I. CASE SUMMARY

Sample Information

Samples: MY6B40, MY6B41, MY6B42, MY6B98, MY6B99, MY6BA0, MY6BA1, MY6BA2, MY6BA3, MY6BA4, MY6BA5, MY6BA6, MY6BA7, MY6BA8, MY6BA9, MY6BB0, MY6BB1, MY6BB2, MY6BB3, and MY6BB4

Concentration and Matrix: Low Concentration Soil
Analysis: CLP Total Metals and Total Cyanide
SOW: ILM05.4
Collection Date: May 12 and 13, 2010
Sample Receipt Date: May 14, 2010
Preparation Date: May 17, 19, and 20, 2010
Analysis Date: May 18, 20, and 21, 2010

Field QC

Field Blanks (FB): Not Provided
Equipment Blanks (EB): Not Provided
Background Samples (BG): Not Provided
Field Duplicates (D1): MY6BA9 and MY6BB0
Field Duplicates (D2): MY6B98 and MY6B99

Laboratory QC

Method Blank & Associated Samples: Preparation Blank-Soil (PBS) and samples listed above
Matrix Spike: MY6B98S
Duplicates: MY6B98D
ICP Serial Dilution: MY6B98L

Analysis: CLP Total Metals and Total Cyanide

Analyte	Sample Preparation and Digestion Date	Analysis Date
ICP-AES Metals	May 17, 2010	May 21, 2010
Mercury	May 19, 2010	May 20, 2010
Cyanide	May 20, 2010	May 20, 2010
Percent Solids	May 17, 2010	May 18, 2010

CLP PO Action

None.

Sampling Issues

None.

Additional Comments

The following samples were diluted and re-analyzed due to high analyte concentrations that exceed the instrument's linear range.

Sample	Dilution	Analyte
MY6BA9	3-fold	Mercury
MY6BB0	3-fold	Mercury
MY6BB1	3-fold	Mercury
MY6BB3	5-fold	Mercury
MY6BB4	3-fold	Mercury

All method requirements specified in the EPA Contract Laboratory Program (CLP) Inorganic Statement of Work (SOW), except as noted, have been met.

Analytical results are listed in Table 1A with qualifications. Definitions of data qualifiers used in Table 1A are provided in Table 1B.

This report was prepared in accordance with the following documents:

- Region 9 Standard Operating Procedure 906, *Guidelines for Data Review of Contract Laboratory Program Analytical Services (CLPAS) Inorganic Data Packages*;
- *USEPA Contract Laboratory Program Statement of Work For Inorganic Analysis Multi-Media, Multi-Concentration* ILM05.3, March 2004;
- *ILM05.3 to ILM05.4 Summary of Changes*, December 1, 2006; and
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

II. VALIDATION SUMMARY

The data were evaluated based on the following parameters:

	Parameter	Acceptable	Comment
1.	Data Completeness	Yes	
2.	Sample Preservation and Holding Times	Yes	
3.	Calibration	Yes	
	a. Initial		
	b. Initial and Continuing Calibration Verification		
	c. CRQL Check Standard (CRI)		
4.	Blanks	Yes	
5.	ICP Interference Check Sample (ICS)	Yes	
6.	Laboratory Control Sample (LCS)	Yes	
7.	Duplicate Sample Analysis	No	B
8.	Matrix Spike Sample Analysis	No	C
9.	ICP Serial Dilution Analysis	No	D
10.	Field Duplicate Sample Analysis	No	E
11.	Sample Quantitation	Yes	A
12.	Overall Assessment	Yes	

III. VALIDITY AND COMMENTS

A. Results above the method detection limit but below the contract required quantitation limit (denoted with an "L" qualifier) are estimated and flagged "J" in Table 1A.

Results above the method detection limit (MDL) but below the contract required quantitation limit (CRQL) are considered qualitatively acceptable but quantitatively unreliable due to uncertainties in the analytical precision near the limit of quantitation.

B. The following results are estimated and flagged "J" in Table 1A because laboratory duplicate results are outside method QC limits.

- Calcium and magnesium in all samples

Laboratory duplicate results of sample MY6B98D do not meet the ≤ 35 relative percent difference (RPD) for soil criterion for precision as listed below.

Analyte	Laboratory Duplicate, RPD
Calcium	63
Magnesium	66

Results for analytes listed above in all samples are considered quantitatively uncertain.

Duplicate analyses demonstrate the analytical precision obtained for each sample matrix. The imprecision between duplicate results may be due to high levels of solids in the sample or poor laboratory technique.

C. The following results are estimated and flagged "J" or "UJ" in Table 1A because matrix spike recovery results are outside method QC limits.

- Antimony, copper, and selenium in all samples

The matrix spike recovery results for QC sample MY6B98S did not meet the 75-125% criterion for accuracy. The percent recovery and possible percent bias for the analytes listed above are presented below and are based on an ideal recovery of 100%.

Analyte	% Recovery	% Bias
Antimony	-4	-104
Copper	127	+27
Selenium	71	-29

Results above the MDL are considered quantitatively uncertain. Results reported for antimony and selenium in all samples may be biased low. However, results for copper may be biased high.

According to the inorganic SOW, when the pre-digestion spike recovery results for ICP analytes fall outside the 75-125% control limits, a post-digestion spike must be performed for those elements that do not meet the specified criterion. The following post-digestion spike recovery results for sample MY6B98A were obtained.

Analyte	Post-Digestion Spike, % Recovery
Antimony	99
Copper	2
Selenium	94

Since the post-digestion spike recovery results were acceptable for antimony and selenium, the low pre-digestion spike recovery results may indicate poor laboratory technique or matrix effects which may interfere with accurate analysis. However, since both the post- and pre-digestion spikes for copper did not meet the QC criterion, matrix effects may be present in the sample digestate which may interfere with the analyte signal during analysis.

The matrix spike sample analysis provides information about the effect of the sample matrix on the digestion and measurement methodology.

D. The following results are estimated and flagged "J" in Table 1A because ICP serial dilution results are outside method QC limits.

- Cadmium, iron, and magnesium in all samples

The percent difference for the ICP serial dilution analysis of sample MY6B98L did not meet the ±10% difference criterion for the analytes shown below.

Analyte	% Difference
Cadmium	-36
Iron	+13
Magnesium	+11

Results reported for analytes listed above in all samples are considered quantitatively uncertain. Chemical and physical interferences may exist due to sample matrix effects. The cadmium result for the diluted sample was lower than the original. Therefore, the reported cadmium sample results may be biased high. However, iron and magnesium results for the diluted sample were higher than the original. Therefore, the reported iron and magnesium sample results may be biased low.

A five-fold dilution of the laboratory QC sample is performed in association with the ICP procedure to indicate whether interference exists due to sample matrix effects. If the analyte concentration is sufficiently high (minimally a factor of 50 above the MDL in the original sample), the five-fold serial dilution must agree within 10% of the original results after correction for dilution.

E. A comparison of field duplicate pair results indicates the following relative percent difference (RPD) exceeds the 35 RPD laboratory criterion for precision.

Analyte	MY6BA9 (D1) mg/kg	MY6BB0 (D1) mg/kg	RPD
Calcium	12400	17800	36
Mercury	4.7	3.0	44

Since sampling variability is included in the measurement, field duplicate results are expected to vary more than laboratory duplicates. The effect on data quality is not known.

The analysis of field duplicate samples is a measure of both field and analytical precision. The imprecision in the results of the analysis of the field duplicate pair may be due to the sample matrix, high levels of solids in the sample, poor sampling, or laboratory technique.

TABLE 1B

DATA QUALIFIER DEFINITIONS FOR INORGANIC DATA REVIEW

The definitions of the following qualifiers are prepared in accordance with the document *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review*, October 2004.

U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result are an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control (QC) criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.

Appendix D

Data Quality Assessment Results

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Background Soil Type 1	BKG-930	BKG-930-0-2	2-May-10	0	2	N	Aluminum	19000		14700		mg/kg	12.8	RPD<20%
Background Soil Type 1	BKG-930	BKG-930-0-2	2-May-10	0	2	N	Arsenic	36.3		27	J	mg/kg	14.7	RPD<20%
Background Soil Type 1	BKG-930	BKG-930-0-2	2-May-10	0	2	N	Barium	238		373		mg/kg	**22.1**	Soil - RPD<20%
Background Soil Type 1	BKG-930	BKG-930-0-2	2-May-10	0	2	N	Beryllium	0.33	J	0.24	J	mg/kg	15.8	RPD<20%
Background Soil Type 1	BKG-930	BKG-930-0-2	2-May-10	0	2	N	Cadmium	2.2		1.8	J	mg/kg	10.0	RPD<20%
Background Soil Type 1	BKG-930	BKG-930-0-2	2-May-10	0	2	N	Calcium	4040		3640		mg/kg	5.2	RPD<20%
Background Soil Type 1	BKG-930	BKG-930-0-2	2-May-10	0	2	N	Chromium	34.9		30.9		mg/kg	6.1	RPD<20%
Background Soil Type 1	BKG-930	BKG-930-0-2	2-May-10	0	2	N	Cobalt	16.8		19.3		mg/kg	6.9	RPD<20%
Background Soil Type 1	BKG-930	BKG-930-0-2	2-May-10	0	2	N	Copper	108	J	109	J-	mg/kg	0.5	RPD<20%
Background Soil Type 1	BKG-930	BKG-930-0-2	2-May-10	0	2	N	Iron	33200		28300	J	mg/kg	8.0	RPD<20%
Background Soil Type 1	BKG-930	BKG-930-0-2	2-May-10	0	2	N	Lead	23.5		27.8		mg/kg	8.4	RPD<20%
Background Soil Type 1	BKG-930	BKG-930-0-2	2-May-10	0	2	N	Magnesium	9180		7990		mg/kg	6.9	RPD<20%
Background Soil Type 1	BKG-930	BKG-930-0-2	2-May-10	0	2	N	Manganese	947		2470		mg/kg	**44.6**	Soil - RPD<20%
Background Soil Type 1	BKG-930	BKG-930-0-2	2-May-10	0	2	N	Nickel	38.8		34.4		mg/kg	6.0	RPD<20%
Background Soil Type 1	BKG-930	BKG-930-0-2	2-May-10	0	2	N	Potassium	2740		2580	J	mg/kg	3.0	RPD<20%
Background Soil Type 1	BKG-930	BKG-930-0-2	2-May-10	0	2	N	Silver	0.11	J	0.23	J	mg/kg	**35.3**	Soil - RPD<20%
Background Soil Type 1	BKG-930	BKG-930-0-2	2-May-10	0	2	N	Sulfate	3.6	J	4.9	J	mg/kg	15.3	RPD<20%
Background Soil Type 1	BKG-930	BKG-930-0-2	2-May-10	0	2	N	Vanadium	72.9		64	J	mg/kg	6.5	RPD<20%
Background Soil Type 1	BKG-930	BKG-930-0-2	2-May-10	0	2	N	Zinc	84.3		85.8		mg/kg	0.9	RPD<20%
Background Soil Type 1	BKG-940	BKG-940-0-2	12-May-10	0	2	N	Aluminum	17400		18000		mg/kg	1.7	RPD<20%
Background Soil Type 1	BKG-940	BKG-940-0-2	12-May-10	0	2	N	Arsenic	56.4	J	42	J	mg/kg	14.6	RPD<20%
Background Soil Type 1	BKG-940	BKG-940-0-2	12-May-10	0	2	N	Barium	202		195		mg/kg	1.8	RPD<20%
Background Soil Type 1	BKG-940	BKG-940-0-2	12-May-10	0	2	N	Beryllium	0.63		0.65		mg/kg	1.6	RPD<20%
Background Soil Type 1	BKG-940	BKG-940-0-2	12-May-10	0	2	N	Cadmium	1.1		1.1		mg/kg	0.0	RPD<20%
Background Soil Type 1	BKG-940	BKG-940-0-2	12-May-10	0	2	N	Calcium	4780		4960		mg/kg	1.8	RPD<20%
Background Soil Type 1	BKG-940	BKG-940-0-2	12-May-10	0	2	N	Chromium	40.3		43.2		mg/kg	3.5	RPD<20%
Background Soil Type 1	BKG-940	BKG-940-0-2	12-May-10	0	2	N	Cobalt	18.1		18.5		mg/kg	1.1	RPD<20%
Background Soil Type 1	BKG-940	BKG-940-0-2	12-May-10	0	2	N	Copper	47.8		52		mg/kg	4.2	RPD<20%
Background Soil Type 1	BKG-940	BKG-940-0-2	12-May-10	0	2	N	Iron	36,300		35,000		mg/kg	1.8	RPD<20%
Background Soil Type 1	BKG-940	BKG-940-0-2	12-May-10	0	2	N	Lead	10.3		11.3		mg/kg	4.6	RPD<20%
Background Soil Type 1	BKG-940	BKG-940-0-2	12-May-10	0	2	N	Magnesium	7520		8390.0		mg/kg	5.5	RPD<20%
Background Soil Type 1	BKG-940	BKG-940-0-2	12-May-10	0	2	N	Manganese	1020		1120		mg/kg	4.7	RPD<20%
Background Soil Type 1	BKG-940	BKG-940-0-2	12-May-10	0	2	N	Nickel	43.5		45.4		mg/kg	2.1	RPD<20%
Background Soil Type 1	BKG-940	BKG-940-0-2	12-May-10	0	2	N	Potassium	2970		3200		mg/kg	3.7	RPD<20%
Background Soil Type 1	BKG-940	BKG-940-0-2	12-May-10	0	2	N	Sodium	61.1	J	66.5	J	mg/kg	4.2	RPD<20%
Background Soil Type 1	BKG-940	BKG-940-0-2	12-May-10	0	2	N	Thallium	4	J	3	J	mg/kg	11.1	RPD<20%
Background Soil Type 1	BKG-940	BKG-940-0-2	12-May-10	0	2	N	Vanadium	64		71		mg/kg	5.2	RPD<20%
Background Soil Type 1	BKG-940	BKG-940-0-2	12-May-10	0	2	N	Zinc	100	J	63.1	J	mg/kg	**22.6**	Soil - RPD<20%
Ground Water	GW-9999904	GW-9999904	6-May-10	0	0	N	Barium	6	J	7	J	ug/L	1.5	RPD<20%
Ground Water	GW-9999904	GW-9999904	6-May-10	0	0	N	Calcium	191,000		192,000		ug/L	0.3	RPD<20%
Ground Water	GW-9999904	GW-9999904	6-May-10	0	0	N	Copper	5.2	J	5.4	J	ug/L	1.9	RPD<20%
Ground Water	GW-9999904	GW-9999904	6-May-10	0	0	N	Iron	104		47.6	J	ug/L	**37.2**	10 ug/L
Ground Water	GW-9999904	GW-9999904	6-May-10	0	0	N	Magnesium	35,100		35,300		ug/L	0.3	RPD<20%
Ground Water	GW-9999904	GW-9999904	6-May-10	0	0	N	Potassium	1470	J	1500	J	ug/L	1.0	RPD<20%
Ground Water	GW-9999904	GW-9999904	6-May-10	0	0	N	Sodium	48300		48400		ug/L	0.1	RPD<20%
Ground Water	GW-9999904	GW-9999904	6-May-10	0	0	N	Vanadium	3.3	J	3.3	J	ug/L	0.0	RPD<20%
Ground Water	GW-9999904	GW-9999904	6-May-10	0	0	N	Zinc	42.1	J	42.2	J	ug/L	0.1	RPD<20%
Ground Water	GW-9999956	GW-9999956	10-May-10	0	0	N	Arsenic	13.5		13.9		ug/L	1.5	RPD<20%
Ground Water	GW-9999956	GW-9999956	10-May-10	0	0	N	Bromide	280		280		ug/L	0.0	RPD<20%
Ground Water	GW-9999956	GW-9999956	10-May-10	0	0	N	Calcium	36900		39200		ug/L	3.0	RPD<20%
Ground Water	GW-9999956	GW-9999956	10-May-10	0	0	N	Chloride	48000		48000		ug/L	0.0	RPD<20%
Ground Water	GW-9999956	GW-9999956	10-May-10	0	0	N	Fluoride	1,500		1,500		ug/L	0.0	RPD<20%
Ground Water	GW-9999956	GW-9999956	10-May-10	0	0	N	Magnesium	19,500		20,600		ug/L	2.7	RPD<20%
Ground Water	GW-9999956	GW-9999956	10-May-10	0	0	N	Potassium	5400		5700		ug/L	2.7	RPD<20%
Ground Water	GW-9999956	GW-9999956	10-May-10	0	0	N	Sodium	93100		97900		ug/L	2.5	RPD<20%
Ground Water	GW-9999956	GW-9999956	10-May-10	0	0	N	Sulfate	32000		32000		ug/L	0.0	RPD<20%
Ground Water	GW-9999956	GW-9999956	10-May-10	0	0	N	Total Dissolved Solids	460,000		450,000		ug/L	1.1	RPD<20%
Ground Water	GW-9999956	GW-9999956	10-May-10	0	0	N	Vanadium	3.5	J	3.9	J	ug/L	5.4	RPD<20%
Ground Water	GW-9999956	GW-9999956	10-May-10	0	0	N	Zinc	66.7	J	103	J	ug/L	**21.4**	6 ug/L
Ground Water	GW-9999958	GW-9999958	7-May-10	0	0	N	Barium	71	J	71	J	ug/L	0.0	RPD<20%
Ground Water	GW-9999958	GW-9999958	7-May-10	0	0	N	Bromide	290		270		ug/L	3.6	RPD<20%
Ground Water	GW-9999958	GW-9999958	7-May-10	0	0	N	Calcium	69800		70200		ug/L	0.3	RPD<20%
Ground Water	GW-9999958	GW-9999958	7-May-10	0	0	N	Chloride	54000		55000		ug/L	0.9	RPD<20%
Ground Water	GW-9999958	GW-9999958	7-May-10	0	0	N	Cobalt	3	J	3	J	ug/L	1.9	RPD<20%
Ground Water	GW-9999958	GW-9999958	7-May-10	0	0	N	Copper	85.3		104		ug/L	9.9	RPD<20%
Ground Water	GW-9999958	GW-9999958	7-May-10	0	0	N	Fluoride	620		620		ug/L	0.0	RPD<20%
Ground Water	GW-9999958	GW-9999958	7-May-10	0	0	N	Iron	893	J	539	J	ug/L	**24.7**	10 ug/L
Ground Water	GW-9999958	GW-9999958	7-May-10	0	0	N	Lead	16.8		12.2		ug/L	15.9	RPD<20%
Ground Water	GW-9999958	GW-9999958	7-May-10	0	0	N	Magnesium	29200		29400		ug/L	0.3	RPD<20%
Ground Water	GW-9999958	GW-9999958	7-May-10	0	0	N	Manganese	4	J	5	J	ug/L	9.3	RPD<20%
Ground Water	GW-9999958	GW-9999958	7-May-10	0	0	N	Potassium	2270	J	2280	J	ug/L	0.2	RPD<20%
Ground Water	GW-9999958	GW-9999958	7-May-10	0	0	N	Selenium	17.2	J	16.5	J	ug/L	2.1	RPD<20%
Ground Water	GW-9999958	GW-9999958	7-May-10	0	0	N	Sodium	94400		94600		ug/L	0.1	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Ground Water	GW-9999958	GW-9999958	7-May-10	0	0	N	Sulfate	220000		220000		ug/L	0.0	RPD<20%
Ground Water	GW-9999958	GW-9999958	7-May-10	0	0	N	Total Dissolved Solids	670000		620000		ug/L	3.9	RPD<20%
Ground Water	GW-9999958	GW-9999958	7-May-10	0	0	N	Vanadium	5.8	J	5.8	J	ug/L	0.0	RPD<20%
Ground Water	GW-9999958	GW-9999958	7-May-10	0	0	N	Zinc	149		156		ug/L	2.3	RPD<20%
Ground Water	GW-9999959	GW-9999959	8-May-10	0	0	N	Bromide	210		240		ug/L	6.7	RPD<20%
Ground Water	GW-9999959	GW-9999959	8-May-10	0	0	N	Calcium	84,900		93,100		ug/L	4.6	RPD<20%
Ground Water	GW-9999959	GW-9999959	8-May-10	0	0	N	Chloride	67000		66000		ug/L	0.8	RPD<20%
Ground Water	GW-9999959	GW-9999959	8-May-10	0	0	N	Fluoride	360	J	150		ug/L	**41.2**	Nutrient
Ground Water	GW-9999959	GW-9999959	8-May-10	0	0	N	Magnesium	18,500		20,000		ug/L	3.9	RPD<20%
Ground Water	GW-9999959	GW-9999959	8-May-10	0	0	N	Potassium	633	J	747	J	ug/L	8.3	RPD<20%
Ground Water	GW-9999959	GW-9999959	8-May-10	0	0	N	Sodium	22,400		24,000		ug/L	3.4	RPD<20%
Ground Water	GW-9999959	GW-9999959	8-May-10	0	0	N	Sulfate	150,000		74,000		ug/L	**33.9**	TDS-Questionable
Ground Water	GW-9999959	GW-9999959	8-May-10	0	0	N	Total Dissolved Solids	28000000		540000		ug/L	**96.2**	TDS-Questionable
Ground Water	GW-9999959	GW-9999959	8-May-10	0	0	N	Vanadium	4.1	J	5.1	J	ug/L	10.9	RPD<20%
Ground Water	GW-9999959	GW-9999959	8-May-10	0	0	N	Zinc	53.9	J	63.3	J	ug/L	8.0	RPD<20%
Ground Water	GW-9999962	GW-9999962	10-May-10	0	0	N	Arsenic	21		21		ug/L	0.5	RPD<20%
Ground Water	GW-9999962	GW-9999962	10-May-10	0	0	N	Bromide	160		200		ug/L	11.1	RPD<20%
Ground Water	GW-9999962	GW-9999962	10-May-10	0	0	N	Calcium	33300		33200.0		ug/L	0.2	RPD<20%
Ground Water	GW-9999962	GW-9999962	10-May-10	0	0	N	Chloride	35000		34000		ug/L	1.4	RPD<20%
Ground Water	GW-9999962	GW-9999962	10-May-10	0	0	N	Chromium	1	J	0	J	ug/L	19.0	RPD<20%
Ground Water	GW-9999962	GW-9999962	10-May-10	0	0	N	Fluoride	920		940		ug/L	1.1	RPD<20%
Ground Water	GW-9999962	GW-9999962	10-May-10	0	0	N	Magnesium	11200		11200		ug/L	0.0	RPD<20%
Ground Water	GW-9999962	GW-9999962	10-May-10	0	0	N	Potassium	2,840	J	2,860	J	ug/L	0.4	RPD<20%
Ground Water	GW-9999962	GW-9999962	10-May-10	0	0	N	Sodium	155000		153000		ug/L	0.6	RPD<20%
Ground Water	GW-9999962	GW-9999962	10-May-10	0	0	N	Sulfate	52,000		52,000		ug/L	0.0	RPD<20%
Ground Water	GW-9999962	GW-9999962	10-May-10	0	0	N	Total Dissolved Solids	550000		550000		ug/L	0.0	RPD<20%
Ground Water	GW-9999962	GW-9999962	10-May-10	0	0	N	Vanadium	17.3	J	17.1	J	ug/L	0.6	RPD<20%
Ground Water	GW-9999962	GW-9999962	10-May-10	0	0	N	Zinc	16	J	12.4	J	ug/L	12.7	RPD<20%
Ground Water	GW-9999963	GW-9999963	12-May-10	0	0	N	Barium	238		248		ug/L	2.1	RPD<20%
Ground Water	GW-9999963	GW-9999963	12-May-10	0	0	N	Bromide	180		220		ug/L	10.0	RPD<20%
Ground Water	GW-9999963	GW-9999963	12-May-10	0	0	N	Calcium	138000		139000		ug/L	0.4	RPD<20%
Ground Water	GW-9999963	GW-9999963	12-May-10	0	0	N	Chloride	43000		43000		ug/L	0.0	RPD<20%
Ground Water	GW-9999963	GW-9999963	12-May-10	0	0	N	Fluoride	130		110		ug/L	8.3	RPD<20%
Ground Water	GW-9999963	GW-9999963	12-May-10	0	0	N	Iron	1,060		1,210		ug/L	6.6	RPD<20%
Ground Water	GW-9999963	GW-9999963	12-May-10	0	0	N	Magnesium	16900		17000		ug/L	0.3	RPD<20%
Ground Water	GW-9999963	GW-9999963	12-May-10	0	0	N	Manganese	2,920		2,680		ug/L	4.3	RPD<20%
Ground Water	GW-9999963	GW-9999963	12-May-10	0	0	N	Potassium	1300	J	1380	J	ug/L	3.0	RPD<20%
Ground Water	GW-9999963	GW-9999963	12-May-10	0	0	N	Sodium	40100		41000		ug/L	1.1	RPD<20%
Ground Water	GW-9999963	GW-9999963	12-May-10	0	0	N	Sulfate	56000		57000		ug/L	0.9	RPD<20%
Ground Water	GW-9999963	GW-9999963	12-May-10	0	0	N	Total Dissolved Solids	600,000		600,000		ug/L	0.0	RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Aluminum	915		888		ug/L	1.5	RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Arsenic	5.7	J	5.8	J	ug/L	0.9	RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Barium	148	J	141	J	ug/L	2.4	RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Bromide	18000		19000		ug/L	2.7	RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Cadmium	5.4		5.4		ug/L	0.0	RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Calcium	1,130,000		1,140,000		ug/L	0.4	RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Chloride	4,100,000		4,300,000		ug/L	2.4	RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Cobalt	4.5	J	5	J	ug/L	5.3	RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Copper	61		61		ug/L	0.2	RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Fluoride	720		720		ug/L	0.0	RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Lead	7	J	6	J	ug/L	10.2	RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Magnesium	439,000		426,000		ug/L	1.5	RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Manganese	815		787		ug/L	1.7	RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Mercury	0	J	0		ug/L	**31.7**	Soil - RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Nickel	32.4	J	32	J	ug/L	0.6	RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Nitrogen, Total Kjeldahl	36000		63000		ug/L	**27.3**	Soil - RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Potassium	600000		622000		ug/L	1.8	RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Selenium	341		334		ug/L	1.0	RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Silver	9.2	J	9.3	J	ug/L	0.5	RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Sodium	1700000		1760000		ug/L	1.7	RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Sulfate	500000		460000		ug/L	4.2	RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Total Dissolved Solids	9400000		9900000		ug/L	2.6	RPD<20%
Ground Water	MW-11-S	MW-11-S	4-May-10	0	0	N	Zinc	34.6	J	34.9	J	ug/L	0.4	RPD<20%
Ground Water	MW-11-S	MW-11-S-F	4-May-10	0	0	D	Aluminum	101	J	73	J	ug/L	16.1	RPD<20%
Ground Water	MW-11-S	MW-11-S-F	4-May-10	0	0	D	Arsenic	4.5	J	4.9	J	ug/L	4.3	RPD<20%
Ground Water	MW-11-S	MW-11-S-F	4-May-10	0	0	D	Barium	116	J	122	J	ug/L	2.5	RPD<20%
Ground Water	MW-11-S	MW-11-S-F	4-May-10	0	0	D	Cadmium	4.4	J	4.9	J	ug/L	5.4	RPD<20%
Ground Water	MW-11-S	MW-11-S-F	4-May-10	0	0	D	Calcium	925,000		953,000		ug/L	1.5	RPD<20%
Ground Water	MW-11-S	MW-11-S-F	4-May-10	0	0	D	Cobalt	6	J	5	J	ug/L	9.1	RPD<20%
Ground Water	MW-11-S	MW-11-S-F	4-May-10	0	0	D	Copper	16	J	16.9	J	ug/L	2.7	RPD<20%
Ground Water	MW-11-S	MW-11-S-F	4-May-10	0	0	D	Iron	27	J	35.6	J	ug/L	13.7	RPD<20%
Ground Water	MW-11-S	MW-11-S-F	4-May-10	0	0	D	Magnesium	362,000		390,000		ug/L	3.7	RPD<20%
Ground Water	MW-11-S	MW-11-S-F	4-May-10	0	0	D	Manganese	744		786		ug/L	2.7	RPD<20%
Ground Water	MW-11-S	MW-11-S-F	4-May-10	0	0	D	Mercury	0.1	J	0.13	J	ug/L	13.0	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Ground Water	MW-11-S	MW-11-S-F	4-May-10	0	0	D	Nickel	29	J	30	J	ug/L	2.9	RPD<20%
Ground Water	MW-11-S	MW-11-S-F	4-May-10	0	0	D	Potassium	566000		578000		ug/L	1.0	RPD<20%
Ground Water	MW-11-S	MW-11-S-F	4-May-10	0	0	D	Selenium	287		306		ug/L	3.2	RPD<20%
Ground Water	MW-11-S	MW-11-S-F	4-May-10	0	0	D	Silver	3.1	J	3.9	J	ug/L	11.4	RPD<20%
Ground Water	MW-11-S	MW-11-S-F	4-May-10	0	0	D	Sodium	1600000		1620000		ug/L	0.6	RPD<20%
Ground Water	MW-11-S	MW-11-S-F	4-May-10	0	0	D	Vanadium	4	J	5	J	ug/L	4.7	RPD<20%
Ground Water	MW-11-S	MW-11-S-F	4-May-10	0	0	D	Zinc	10.8	J	7.7	J	ug/L	16.8	RPD<20%
Off-site Soil Area 149	OFS-149-1	OFS-949-1	3-May-10	0	0.2	N	Aluminum	17800		16100		mg/kg	5.0	RPD<20%
Off-site Soil Area 149	OFS-149-1	OFS-949-1	3-May-10	0	0.2	N	Antimony	1	J	1	J	mg/kg	2.5	RPD<20%
Off-site Soil Area 149	OFS-149-1	OFS-949-1	3-May-10	0	0.2	N	Arsenic	12.5		12.1		mg/kg	1.6	RPD<20%
Off-site Soil Area 149	OFS-149-1	OFS-949-1	3-May-10	0	0.2	N	Barium	238		228		mg/kg	2.1	RPD<20%
Off-site Soil Area 149	OFS-149-1	OFS-949-1	3-May-10	0	0.2	N	Cadmium	1		1		mg/kg	3.2	RPD<20%
Off-site Soil Area 149	OFS-149-1	OFS-949-1	3-May-10	0	0.2	N	Calcium	6720		7840		mg/kg	7.7	RPD<20%
Off-site Soil Area 149	OFS-149-1	OFS-949-1	3-May-10	0	0.2	N	Chromium	19.9		19.6		mg/kg	0.8	RPD<20%
Off-site Soil Area 149	OFS-149-1	OFS-949-1	3-May-10	0	0.2	N	Cobalt	11.3		10		mg/kg	6.1	RPD<20%
Off-site Soil Area 149	OFS-149-1	OFS-949-1	3-May-10	0	0.2	N	Copper	44.8		49.9		mg/kg	5.4	RPD<20%
Off-site Soil Area 149	OFS-149-1	OFS-949-1	3-May-10	0	0.2	N	Iron	22800		19700		mg/kg	7.3	RPD<20%
Off-site Soil Area 149	OFS-149-1	OFS-949-1	3-May-10	0	0.2	N	Lead	23.7		28.7		mg/kg	9.5	RPD<20%
Off-site Soil Area 149	OFS-149-1	OFS-949-1	3-May-10	0	0.2	N	Magnesium	7250		6600		mg/kg	4.7	RPD<20%
Off-site Soil Area 149	OFS-149-1	OFS-949-1	3-May-10	0	0.2	N	Manganese	615		541		mg/kg	6.4	RPD<20%
Off-site Soil Area 149	OFS-149-1	OFS-949-1	3-May-10	0	0.2	N	Mercury	0.046	J	0.075	J	mg/kg	**24.0**	Soil - RPD<20%
Off-site Soil Area 149	OFS-149-1	OFS-949-1	3-May-10	0	0.2	N	Nickel	21.8		22.3		mg/kg	1.1	RPD<20%
Off-site Soil Area 149	OFS-149-1	OFS-949-1	3-May-10	0	0.2	N	Potassium	2590	J+	2770	J+	mg/kg	3.4	RPD<20%
Off-site Soil Area 149	OFS-149-1	OFS-949-1	3-May-10	0	0.2	N	Sodium	94	J	105	J	mg/kg	5.5	RPD<20%
Off-site Soil Area 149	OFS-149-1	OFS-949-1	3-May-10	0	0.2	N	Vanadium	41.7		42.9		mg/kg	1.4	RPD<20%
Off-site Soil Area 149	OFS-149-1	OFS-949-1	3-May-10	0	0.2	N	Zinc	97.400		102		mg/kg	2.3	RPD<20%
Off-site Soil Area 150	OFS-150-1	OFS-950-1	3-May-10	0	0.2	N	Aluminum	17300		17300		mg/kg	0.0	RPD<20%
Off-site Soil Area 150	OFS-150-1	OFS-950-1	3-May-10	0	0.2	N	Antimony	1	J	1	J	mg/kg	2.3	RPD<20%
Off-site Soil Area 150	OFS-150-1	OFS-950-1	3-May-10	0	0.2	N	Arsenic	17		17.3		mg/kg	0.9	RPD<20%
Off-site Soil Area 150	OFS-150-1	OFS-950-1	3-May-10	0	0.2	N	Barium	141		146		mg/kg	1.7	RPD<20%
Off-site Soil Area 150	OFS-150-1	OFS-950-1	3-May-10	0	0.2	N	Cadmium	0.71		0.81		mg/kg	6.6	RPD<20%
Off-site Soil Area 150	OFS-150-1	OFS-950-1	3-May-10	0	0.2	N	Calcium	8980		9710		mg/kg	3.9	RPD<20%
Off-site Soil Area 150	OFS-150-1	OFS-950-1	3-May-10	0	0.2	N	Chromium	30		30		mg/kg	0.5	RPD<20%
Off-site Soil Area 150	OFS-150-1	OFS-950-1	3-May-10	0	0.2	N	Cobalt	15		15.4		mg/kg	1.3	RPD<20%
Off-site Soil Area 150	OFS-150-1	OFS-950-1	3-May-10	0	0.2	N	Copper	67.5		70.4		mg/kg	2.1	RPD<20%
Off-site Soil Area 150	OFS-150-1	OFS-950-1	3-May-10	0	0.2	N	Iron	27,000		27,000		mg/kg	0.0	RPD<20%
Off-site Soil Area 150	OFS-150-1	OFS-950-1	3-May-10	0	0.2	N	Lead	17		18		mg/kg	1.1	RPD<20%
Off-site Soil Area 150	OFS-150-1	OFS-950-1	3-May-10	0	0.2	N	Magnesium	7,470		7,590		mg/kg	0.8	RPD<20%
Off-site Soil Area 150	OFS-150-1	OFS-950-1	3-May-10	0	0.2	N	Manganese	521		557.0		mg/kg	3.3	RPD<20%
Off-site Soil Area 150	OFS-150-1	OFS-950-1	3-May-10	0	0.2	N	Nickel	24		24		mg/kg	1.1	RPD<20%
Off-site Soil Area 150	OFS-150-1	OFS-950-1	3-May-10	0	0.2	N	Potassium	5660	J+	5720	J+	mg/kg	0.5	RPD<20%
Off-site Soil Area 150	OFS-150-1	OFS-950-1	3-May-10	0	0.2	N	Sodium	139	J	142	J	mg/kg	1.1	RPD<20%
Off-site Soil Area 150	OFS-150-1	OFS-950-1	3-May-10	0	0.2	N	Vanadium	55.3		55		mg/kg	0.3	RPD<20%
Off-site Soil Area 150	OFS-150-1	OFS-950-1	3-May-10	0	0.2	N	Zinc	136		153		mg/kg	5.9	RPD<20%
Off-site Soil Area 151	OFS-151-1	OFS-951-1	3-May-10	0	0.2	N	Aluminum	9620		10800		mg/kg	5.8	RPD<20%
Off-site Soil Area 151	OFS-151-1	OFS-951-1	3-May-10	0	0.2	N	Antimony	0.68	J	0.99	J	mg/kg	18.6	RPD<20%
Off-site Soil Area 151	OFS-151-1	OFS-951-1	3-May-10	0	0.2	N	Arsenic	35.1		47.9		mg/kg	15.4	RPD<20%
Off-site Soil Area 151	OFS-151-1	OFS-951-1	3-May-10	0	0.2	N	Barium	152		167		mg/kg	4.7	RPD<20%
Off-site Soil Area 151	OFS-151-1	OFS-951-1	3-May-10	0	0.2	N	Cadmium	1.9		2.9		mg/kg	**20.8**	Soil - RPD<20%
Off-site Soil Area 151	OFS-151-1	OFS-951-1	3-May-10	0	0.2	N	Calcium	16,100		16,000		mg/kg	0.3	RPD<20%
Off-site Soil Area 151	OFS-151-1	OFS-951-1	3-May-10	0	0.2	N	Chromium	12.5		14.4		mg/kg	7.1	RPD<20%
Off-site Soil Area 151	OFS-151-1	OFS-951-1	3-May-10	0	0.2	N	Cobalt	8		10		mg/kg	11.5	RPD<20%
Off-site Soil Area 151	OFS-151-1	OFS-951-1	3-May-10	0	0.2	N	Copper	87.3		101		mg/kg	7.3	RPD<20%
Off-site Soil Area 151	OFS-151-1	OFS-951-1	3-May-10	0	0.2	N	Iron	16600		21700		mg/kg	13.3	RPD<20%
Off-site Soil Area 151	OFS-151-1	OFS-951-1	3-May-10	0	0.2	N	Lead	124		207		mg/kg	**25.1**	Soil - RPD<20%
Off-site Soil Area 151	OFS-151-1	OFS-951-1	3-May-10	0	0.2	N	Magnesium	5240		6150		mg/kg	8.0	RPD<20%
Off-site Soil Area 151	OFS-151-1	OFS-951-1	3-May-10	0	0.2	N	Manganese	427		544		mg/kg	12.0	RPD<20%
Off-site Soil Area 151	OFS-151-1	OFS-951-1	3-May-10	0	0.2	N	Mercury	0.35	J+	0.65	J+	mg/kg	**30.0**	Soil - RPD<20%
Off-site Soil Area 151	OFS-151-1	OFS-951-1	3-May-10	0	0.2	N	Nickel	12.3		16.3		mg/kg	14.0	RPD<20%
Off-site Soil Area 151	OFS-151-1	OFS-951-1	3-May-10	0	0.2	N	Potassium	4010	J+	3690	J+	mg/kg	4.2	RPD<20%
Off-site Soil Area 151	OFS-151-1	OFS-951-1	3-May-10	0	0.2	N	Selenium	0.77	J	0.79	J	mg/kg	1.3	RPD<20%
Off-site Soil Area 151	OFS-151-1	OFS-951-1	3-May-10	0	0.2	N	Silver	0.48	J	0.74	J	mg/kg	**21.3**	Soil - RPD<20%
Off-site Soil Area 151	OFS-151-1	OFS-951-1	3-May-10	0	0.2	N	Sodium	147	J	169	J	mg/kg	7.0	RPD<20%
Off-site Soil Area 151	OFS-151-1	OFS-951-1	3-May-10	0	0.2	N	Vanadium	31		35.8		mg/kg	7.2	RPD<20%
Off-site Soil Area 151	OFS-151-1	OFS-951-1	3-May-10	0	0.2	N	Zinc	446		722		mg/kg	**23.6**	Soil - RPD<20%
Off-site Soil Area 152	OFS-152-1	OFS-952-1	3-May-10	0	0.2	N	Aluminum	13400		11700		mg/kg	6.8	RPD<20%
Off-site Soil Area 152	OFS-152-1	OFS-952-1	3-May-10	0	0.2	N	Antimony	0.4	J	0.4	J	mg/kg	0.0	RPD<20%
Off-site Soil Area 152	OFS-152-1	OFS-952-1	3-May-10	0	0.2	N	Arsenic	13.9		13.9		mg/kg	0.0	RPD<20%
Off-site Soil Area 152	OFS-152-1	OFS-952-1	3-May-10	0	0.2	N	Barium	206		176		mg/kg	7.9	RPD<20%
Off-site Soil Area 152	OFS-152-1	OFS-952-1	3-May-10	0	0.2	N	Cadmium	0.87		0.78		mg/kg	5.5	RPD<20%
Off-site Soil Area 152	OFS-152-1	OFS-952-1	3-May-10	0	0.2	N	Calcium	7670		5730		mg/kg	14.5	RPD<20%
Off-site Soil Area 152	OFS-152-1	OFS-952-1	3-May-10	0	0.2	N	Chromium	17.4		15.8		mg/kg	4.8	RPD<20%
Off-site Soil Area 152	OFS-152-1	OFS-952-1	3-May-10	0	0.2	N	Cobalt	10.4		9.4		mg/kg	5.1	RPD<20%
Off-site Soil Area 152	OFS-152-1	OFS-952-1	3-May-10	0	0.2	N	Copper	54.4		56.2		mg/kg	1.6	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 152	OFS-152-1	OFS-952-1	3-May-10	0	0.2	N	Iron	18100		16300		mg/kg	5.2	RPD<20%
Off-site Soil Area 152	OFS-152-1	OFS-952-1	3-May-10	0	0.2	N	Lead	26.4		22.8		mg/kg	7.3	RPD<20%
Off-site Soil Area 152	OFS-152-1	OFS-952-1	3-May-10	0	0.2	N	Magnesium	5620.0		4810		mg/kg	7.8	RPD<20%
Off-site Soil Area 152	OFS-152-1	OFS-952-1	3-May-10	0	0.2	N	Manganese	585		505		mg/kg	7.3	RPD<20%
Off-site Soil Area 152	OFS-152-1	OFS-952-1	3-May-10	0	0.2	N	Nickel	23.3		20.5		mg/kg	6.4	RPD<20%
Off-site Soil Area 152	OFS-152-1	OFS-952-1	3-May-10	0	0.2	N	Potassium	2,670	J+	2,430	J+	mg/kg	4.7	RPD<20%
Off-site Soil Area 152	OFS-152-1	OFS-952-1	3-May-10	0	0.2	N	Sodium	79.6	J	86.6	J	mg/kg	4.2	RPD<20%
Off-site Soil Area 152	OFS-152-1	OFS-952-1	3-May-10	0	0.2	N	Vanadium	34.6		30.9		mg/kg	5.6	RPD<20%
Off-site Soil Area 152	OFS-152-1	OFS-952-1	3-May-10	0	0.2	N	Zinc	91		86		mg/kg	2.8	RPD<20%
Off-site Soil Area 153	OFS-153-1	OFS-953-1	3-May-10	0	0.2	N	Aluminum	9190		8210		mg/kg	5.6	RPD<20%
Off-site Soil Area 153	OFS-153-1	OFS-953-1	3-May-10	0	0.2	N	Antimony	0.67	J	0.61	J	mg/kg	4.7	RPD<20%
Off-site Soil Area 153	OFS-153-1	OFS-953-1	3-May-10	0	0.2	N	Arsenic	33.5		28		mg/kg	8.9	RPD<20%
Off-site Soil Area 153	OFS-153-1	OFS-953-1	3-May-10	0	0.2	N	Barium	149		132		mg/kg	6.0	RPD<20%
Off-site Soil Area 153	OFS-153-1	OFS-953-1	3-May-10	0	0.2	N	Cadmium	2		1		mg/kg	9.7	RPD<20%
Off-site Soil Area 153	OFS-153-1	OFS-953-1	3-May-10	0	0.2	N	Calcium	5590		5690		mg/kg	0.9	RPD<20%
Off-site Soil Area 153	OFS-153-1	OFS-953-1	3-May-10	0	0.2	N	Chromium	19		16.1		mg/kg	8.3	RPD<20%
Off-site Soil Area 153	OFS-153-1	OFS-953-1	3-May-10	0	0.2	N	Cobalt	9		7		mg/kg	8.2	RPD<20%
Off-site Soil Area 153	OFS-153-1	OFS-953-1	3-May-10	0	0.2	N	Copper	73		62.5		mg/kg	7.7	RPD<20%
Off-site Soil Area 153	OFS-153-1	OFS-953-1	3-May-10	0	0.2	N	Iron	16500		14900		mg/kg	5.1	RPD<20%
Off-site Soil Area 153	OFS-153-1	OFS-953-1	3-May-10	0	0.2	N	Lead	213		146		mg/kg	18.7	RPD<20%
Off-site Soil Area 153	OFS-153-1	OFS-953-1	3-May-10	0	0.2	N	Magnesium	4350		3910		mg/kg	5.3	RPD<20%
Off-site Soil Area 153	OFS-153-1	OFS-953-1	3-May-10	0	0.2	N	Manganese	392	J	370	J	mg/kg	2.9	RPD<20%
Off-site Soil Area 153	OFS-153-1	OFS-953-1	3-May-10	0	0.2	N	Mercury	0	J+	0	J+	mg/kg	**27.5**	Soil - RPD<20%
Off-site Soil Area 153	OFS-153-1	OFS-953-1	3-May-10	0	0.2	N	Nickel	15.1		13.1		mg/kg	7.1	RPD<20%
Off-site Soil Area 153	OFS-153-1	OFS-953-1	3-May-10	0	0.2	N	Potassium	2310	J+	2240	J+	mg/kg	1.5	RPD<20%
Off-site Soil Area 153	OFS-153-1	OFS-953-1	3-May-10	0	0.2	N	Silver	0.64	J	0.31	J	mg/kg	**34.7**	Soil - RPD<20%
Off-site Soil Area 153	OFS-153-1	OFS-953-1	3-May-10	0	0.2	N	Sodium	106	J	122	J	mg/kg	7.0	RPD<20%
Off-site Soil Area 153	OFS-153-1	OFS-953-1	3-May-10	0	0.2	N	Vanadium	30.2		26.8		mg/kg	6.0	RPD<20%
Off-site Soil Area 153	OFS-153-1	OFS-953-1	3-May-10	0	0.2	N	Zinc	314		267		mg/kg	8.1	RPD<20%
Off-site Soil Area 154	OFS-154-1	OFS-954-1	3-May-10	0	0.2	N	Aluminum	12200		12800		mg/kg	2.4	RPD<20%
Off-site Soil Area 154	OFS-154-1	OFS-954-1	3-May-10	0	0.2	N	Antimony	0.5	J	0.51	J	mg/kg	1.0	RPD<20%
Off-site Soil Area 154	OFS-154-1	OFS-954-1	3-May-10	0	0.2	N	Arsenic	40.6		39.2		mg/kg	1.8	RPD<20%
Off-site Soil Area 154	OFS-154-1	OFS-954-1	3-May-10	0	0.2	N	Barium	138		137		mg/kg	0.4	RPD<20%
Off-site Soil Area 154	OFS-154-1	OFS-954-1	3-May-10	0	0.2	N	Cadmium	0.96		1.1		mg/kg	6.8	RPD<20%
Off-site Soil Area 154	OFS-154-1	OFS-954-1	3-May-10	0	0.2	N	Calcium	17400		17300		mg/kg	0.3	RPD<20%
Off-site Soil Area 154	OFS-154-1	OFS-954-1	3-May-10	0	0.2	N	Chromium	15		18		mg/kg	9.6	RPD<20%
Off-site Soil Area 154	OFS-154-1	OFS-954-1	3-May-10	0	0.2	N	Cobalt	10.5		10.3		mg/kg	1.0	RPD<20%
Off-site Soil Area 154	OFS-154-1	OFS-954-1	3-May-10	0	0.2	N	Copper	25.6		26.2		mg/kg	1.2	RPD<20%
Off-site Soil Area 154	OFS-154-1	OFS-954-1	3-May-10	0	0.2	N	Iron	19200		19700		mg/kg	1.3	RPD<20%
Off-site Soil Area 154	OFS-154-1	OFS-954-1	3-May-10	0	0.2	N	Lead	37.5		39.3		mg/kg	2.3	RPD<20%
Off-site Soil Area 154	OFS-154-1	OFS-954-1	3-May-10	0	0.2	N	Magnesium	6360		6660		mg/kg	2.3	RPD<20%
Off-site Soil Area 154	OFS-154-1	OFS-954-1	3-May-10	0	0.2	N	Manganese	644	J	598	J	mg/kg	3.7	RPD<20%
Off-site Soil Area 154	OFS-154-1	OFS-954-1	3-May-10	0	0.2	N	Mercury	0.16	J+	0.2	J+	mg/kg	11.1	RPD<20%
Off-site Soil Area 154	OFS-154-1	OFS-954-1	3-May-10	0	0.2	N	Nickel	12.4		13.7		mg/kg	5.0	RPD<20%
Off-site Soil Area 154	OFS-154-1	OFS-954-1	3-May-10	0	0.2	N	Potassium	2510	J+	2650	J+	mg/kg	2.7	RPD<20%
Off-site Soil Area 154	OFS-154-1	OFS-954-1	3-May-10	0	0.2	N	Silver	0.11	J	0.15	J	mg/kg	15.4	RPD<20%
Off-site Soil Area 154	OFS-154-1	OFS-954-1	3-May-10	0	0.2	N	Sodium	70.8	J	79.2	J	mg/kg	5.6	RPD<20%
Off-site Soil Area 154	OFS-154-1	OFS-954-1	3-May-10	0	0.2	N	Vanadium	33		33		mg/kg	0.2	RPD<20%
Off-site Soil Area 154	OFS-154-1	OFS-954-1	3-May-10	0	0.2	N	Zinc	148		148		mg/kg	0.0	RPD<20%
Off-site Soil Area 155	OFS-155-1	OFS-955-1	3-May-10	0	0.2	N	Aluminum	17100		17700		mg/kg	1.7	RPD<20%
Off-site Soil Area 155	OFS-155-1	OFS-955-1	3-May-10	0	0.2	N	Antimony	0.66	J	0.67	J	mg/kg	0.8	RPD<20%
Off-site Soil Area 155	OFS-155-1	OFS-955-1	3-May-10	0	0.2	N	Arsenic	29		31		mg/kg	2.7	RPD<20%
Off-site Soil Area 155	OFS-155-1	OFS-955-1	3-May-10	0	0.2	N	Barium	286		279		mg/kg	1.2	RPD<20%
Off-site Soil Area 155	OFS-155-1	OFS-955-1	3-May-10	0	0.2	N	Beryllium	1		1		mg/kg	5.3	RPD<20%
Off-site Soil Area 155	OFS-155-1	OFS-955-1	3-May-10	0	0.2	N	Cadmium	1.9		2		mg/kg	2.6	RPD<20%
Off-site Soil Area 155	OFS-155-1	OFS-955-1	3-May-10	0	0.2	N	Calcium	7540		7660		mg/kg	0.8	RPD<20%
Off-site Soil Area 155	OFS-155-1	OFS-955-1	3-May-10	0	0.2	N	Chromium	33.2		34		mg/kg	1.2	RPD<20%
Off-site Soil Area 155	OFS-155-1	OFS-955-1	3-May-10	0	0.2	N	Cobalt	14.3		15		mg/kg	2.4	RPD<20%
Off-site Soil Area 155	OFS-155-1	OFS-955-1	3-May-10	0	0.2	N	Copper	188	J	219	J	mg/kg	7.6	RPD<20%
Off-site Soil Area 155	OFS-155-1	OFS-955-1	3-May-10	0	0.2	N	Iron	23900		24400.0		mg/kg	1.0	RPD<20%
Off-site Soil Area 155	OFS-155-1	OFS-955-1	3-May-10	0	0.2	N	Lead	44.9		49		mg/kg	4.4	RPD<20%
Off-site Soil Area 155	OFS-155-1	OFS-955-1	3-May-10	0	0.2	N	Magnesium	6350		6550		mg/kg	1.6	RPD<20%
Off-site Soil Area 155	OFS-155-1	OFS-955-1	3-May-10	0	0.2	N	Manganese	1020		903		mg/kg	6.1	RPD<20%
Off-site Soil Area 155	OFS-155-1	OFS-955-1	3-May-10	0	0.2	N	Mercury	0.087	J	0.093	J	mg/kg	3.3	RPD<20%
Off-site Soil Area 155	OFS-155-1	OFS-955-1	3-May-10	0	0.2	N	Nickel	48.6		50.4		mg/kg	1.8	RPD<20%
Off-site Soil Area 155	OFS-155-1	OFS-955-1	3-May-10	0	0.2	N	Potassium	3880	J+	4050	J+	mg/kg	2.1	RPD<20%
Off-site Soil Area 155	OFS-155-1	OFS-955-1	3-May-10	0	0.2	N	Silver	0.32	J	0.5	J	mg/kg	**22.0**	Soil - RPD<20%
Off-site Soil Area 155	OFS-155-1	OFS-955-1	3-May-10	0	0.2	N	Sodium	174	J	96.4	J	mg/kg	**28.7**	Soil - RPD<20%
Off-site Soil Area 155	OFS-155-1	OFS-955-1	3-May-10	0	0.2	N	Vanadium	44.6		45.7		mg/kg	1.2	RPD<20%
Off-site Soil Area 155	OFS-155-1	OFS-955-1	3-May-10	0	0.2	N	Zinc	178		174		mg/kg	1.1	RPD<20%
Off-site Soil Area 156	OFS-156-1	OFS-956-1	4-May-10	0	0.2	N	Aluminum	17100		17400		mg/kg	0.9	RPD<20%
Off-site Soil Area 156	OFS-156-1	OFS-956-1	4-May-10	0	0.2	N	Antimony	0.59	J	0.71	J	mg/kg	9.2	RPD<20%
Off-site Soil Area 156	OFS-156-1	OFS-956-1	4-May-10	0	0.2	N	Arsenic	14.9		15.5		mg/kg	2.0	RPD<20%
Off-site Soil Area 156	OFS-156-1	OFS-956-1	4-May-10	0	0.2	N	Barium	101		106		mg/kg	2.4	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 156	OFS-156-1	OFS-956-1	4-May-10	0	0.2	N	Cadmium	0.91	J	1	J	mg/kg	4.7	RPD<20%
Off-site Soil Area 156	OFS-156-1	OFS-956-1	4-May-10	0	0.2	N	Calcium	16600		16200		mg/kg	1.2	RPD<20%
Off-site Soil Area 156	OFS-156-1	OFS-956-1	4-May-10	0	0.2	N	Chromium	15.3		17.4		mg/kg	6.4	RPD<20%
Off-site Soil Area 156	OFS-156-1	OFS-956-1	4-May-10	0	0.2	N	Cobalt	15		15.8		mg/kg	2.6	RPD<20%
Off-site Soil Area 156	OFS-156-1	OFS-956-1	4-May-10	0	0.2	N	Copper	35.8		39.3		mg/kg	4.7	RPD<20%
Off-site Soil Area 156	OFS-156-1	OFS-956-1	4-May-10	0	0.2	N	Iron	27900		29700		mg/kg	3.1	RPD<20%
Off-site Soil Area 156	OFS-156-1	OFS-956-1	4-May-10	0	0.2	N	Lead	10	J	10	J	mg/kg	0.5	RPD<20%
Off-site Soil Area 156	OFS-156-1	OFS-956-1	4-May-10	0	0.2	N	Magnesium	8,060		8,380		mg/kg	1.9	RPD<20%
Off-site Soil Area 156	OFS-156-1	OFS-956-1	4-May-10	0	0.2	N	Manganese	770		814		mg/kg	2.8	RPD<20%
Off-site Soil Area 156	OFS-156-1	OFS-956-1	4-May-10	0	0.2	N	Nickel	14.6		15.6		mg/kg	3.3	RPD<20%
Off-site Soil Area 156	OFS-156-1	OFS-956-1	4-May-10	0	0.2	N	Potassium	2290	J+	2320	J+	mg/kg	0.7	RPD<20%
Off-site Soil Area 156	OFS-156-1	OFS-956-1	4-May-10	0	0.2	N	Sodium	133	J	92.5	J	mg/kg	18.0	RPD<20%
Off-site Soil Area 156	OFS-156-1	OFS-956-1	4-May-10	0	0.2	N	Vanadium	51.2		54.2		mg/kg	2.8	RPD<20%
Off-site Soil Area 156	OFS-156-1	OFS-956-1	4-May-10	0	0.2	N	Zinc	60.1		63		mg/kg	2.4	RPD<20%
Off-site Soil Area 157	OFS-157-1	OFS-957-1	4-May-10	0	0.2	N	Aluminum	13,100		13,400		mg/kg	1.1	RPD<20%
Off-site Soil Area 157	OFS-157-1	OFS-957-1	4-May-10	0	0.2	N	Antimony	4	J	4	J	mg/kg	2.6	RPD<20%
Off-site Soil Area 157	OFS-157-1	OFS-957-1	4-May-10	0	0.2	N	Arsenic	111		146		mg/kg	13.6	RPD<20%
Off-site Soil Area 157	OFS-157-1	OFS-957-1	4-May-10	0	0.2	N	Barium	68.7		132		mg/kg	**31.5**	Soil - RPD<20%
Off-site Soil Area 157	OFS-157-1	OFS-957-1	4-May-10	0	0.2	N	Beryllium	0.19	J	0.2	J	mg/kg	2.6	RPD<20%
Off-site Soil Area 157	OFS-157-1	OFS-957-1	4-May-10	0	0.2	N	Cadmium	3.2	J	3.3	J	mg/kg	1.5	RPD<20%
Off-site Soil Area 157	OFS-157-1	OFS-957-1	4-May-10	0	0.2	N	Calcium	8,840		9,470		mg/kg	3.4	RPD<20%
Off-site Soil Area 157	OFS-157-1	OFS-957-1	4-May-10	0	0.2	N	Chromium	18.8		16.7		mg/kg	5.9	RPD<20%
Off-site Soil Area 157	OFS-157-1	OFS-957-1	4-May-10	0	0.2	N	Cobalt	13.1		13		mg/kg	0.4	RPD<20%
Off-site Soil Area 157	OFS-157-1	OFS-957-1	4-May-10	0	0.2	N	Copper	198		187		mg/kg	2.9	RPD<20%
Off-site Soil Area 157	OFS-157-1	OFS-957-1	4-May-10	0	0.2	N	Iron	26,400		26,600		mg/kg	0.4	RPD<20%
Off-site Soil Area 157	OFS-157-1	OFS-957-1	4-May-10	0	0.2	N	Lead	119	J	121	J	mg/kg	0.8	RPD<20%
Off-site Soil Area 157	OFS-157-1	OFS-957-1	4-May-10	0	0.2	N	Magnesium	6980		7000		mg/kg	0.1	RPD<20%
Off-site Soil Area 157	OFS-157-1	OFS-957-1	4-May-10	0	0.2	N	Manganese	510		815		mg/kg	**23.0**	Soil - RPD<20%
Off-site Soil Area 157	OFS-157-1	OFS-957-1	4-May-10	0	0.2	N	Mercury	0.21		0.17		mg/kg	10.5	RPD<20%
Off-site Soil Area 157	OFS-157-1	OFS-957-1	4-May-10	0	0.2	N	Nickel	15.9		15.1		mg/kg	2.6	RPD<20%
Off-site Soil Area 157	OFS-157-1	OFS-957-1	4-May-10	0	0.2	N	Potassium	2340	J+	2250	J+	mg/kg	2.0	RPD<20%
Off-site Soil Area 157	OFS-157-1	OFS-957-1	4-May-10	0	0.2	N	Silver	1		1		mg/kg	4.3	RPD<20%
Off-site Soil Area 157	OFS-157-1	OFS-957-1	4-May-10	0	0.2	N	Sodium	158	J	169	J	mg/kg	3.4	RPD<20%
Off-site Soil Area 157	OFS-157-1	OFS-957-1	4-May-10	0	0.2	N	Vanadium	49		50		mg/kg	1.6	RPD<20%
Off-site Soil Area 157	OFS-157-1	OFS-957-1	4-May-10	0	0.2	N	Zinc	492		486		mg/kg	0.6	RPD<20%
Off-site Soil Area 158	OFS-158-1	OFS-958-1	4-May-10	0	0.2	N	Aluminum	18400		18800		mg/kg	1.1	RPD<20%
Off-site Soil Area 158	OFS-158-1	OFS-958-1	4-May-10	0	0.2	N	Antimony	0.76	J	0.72	J	mg/kg	2.7	RPD<20%
Off-site Soil Area 158	OFS-158-1	OFS-958-1	4-May-10	0	0.2	N	Arsenic	16.7		15.6		mg/kg	3.4	RPD<20%
Off-site Soil Area 158	OFS-158-1	OFS-958-1	4-May-10	0	0.2	N	Barium	135		131		mg/kg	1.5	RPD<20%
Off-site Soil Area 158	OFS-158-1	OFS-958-1	4-May-10	0	0.2	N	Beryllium	0.57		0.56		mg/kg	0.9	RPD<20%
Off-site Soil Area 158	OFS-158-1	OFS-958-1	4-May-10	0	0.2	N	Cadmium	0.088	J	0.068	J	mg/kg	12.8	RPD<20%
Off-site Soil Area 158	OFS-158-1	OFS-958-1	4-May-10	0	0.2	N	Calcium	11,500		10,800		mg/kg	3.1	RPD<20%
Off-site Soil Area 158	OFS-158-1	OFS-958-1	4-May-10	0	0.2	N	Chromium	16.2		14.6		mg/kg	5.2	RPD<20%
Off-site Soil Area 158	OFS-158-1	OFS-958-1	4-May-10	0	0.2	N	Cobalt	13.4		14.4		mg/kg	3.6	RPD<20%
Off-site Soil Area 158	OFS-158-1	OFS-958-1	4-May-10	0	0.2	N	Copper	46.9		37.9		mg/kg	10.6	RPD<20%
Off-site Soil Area 158	OFS-158-1	OFS-958-1	4-May-10	0	0.2	N	Iron	28800		30000		mg/kg	2.0	RPD<20%
Off-site Soil Area 158	OFS-158-1	OFS-958-1	4-May-10	0	0.2	N	Lead	18		15		mg/kg	9.1	RPD<20%
Off-site Soil Area 158	OFS-158-1	OFS-958-1	4-May-10	0	0.2	N	Magnesium	8,240		8,550		mg/kg	1.8	RPD<20%
Off-site Soil Area 158	OFS-158-1	OFS-958-1	4-May-10	0	0.2	N	Manganese	745		746		mg/kg	0.1	RPD<20%
Off-site Soil Area 158	OFS-158-1	OFS-958-1	4-May-10	0	0.2	N	Nickel	14.8		15		mg/kg	0.7	RPD<20%
Off-site Soil Area 158	OFS-158-1	OFS-958-1	4-May-10	0	0.2	N	Potassium	1950	J+	1860	J+	mg/kg	2.4	RPD<20%
Off-site Soil Area 158	OFS-158-1	OFS-958-1	4-May-10	0	0.2	N	Sodium	194	J	196	J	mg/kg	0.5	RPD<20%
Off-site Soil Area 158	OFS-158-1	OFS-958-1	4-May-10	0	0.2	N	Vanadium	54.8		53		mg/kg	1.7	RPD<20%
Off-site Soil Area 158	OFS-158-1	OFS-958-1	4-May-10	0	0.2	N	Zinc	104.0	J	82.3	J	mg/kg	11.6	RPD<20%
Off-site Soil Area 159	OFS-159-1	OFS-959-1	4-May-10	0	0.2	N	Aluminum	20,000		17,400		mg/kg	7.0	RPD<20%
Off-site Soil Area 159	OFS-159-1	OFS-959-1	4-May-10	0	0.2	N	Antimony	0.85	J	0.89	J	mg/kg	2.3	RPD<20%
Off-site Soil Area 159	OFS-159-1	OFS-959-1	4-May-10	0	0.2	N	Arsenic	13.9		35.4		mg/kg	**43.6**	Soil - RPD<20%
Off-site Soil Area 159	OFS-159-1	OFS-959-1	4-May-10	0	0.2	N	Barium	141		125		mg/kg	6.0	RPD<20%
Off-site Soil Area 159	OFS-159-1	OFS-959-1	4-May-10	0	0.2	N	Beryllium	0.58		0.48	J	mg/kg	9.4	RPD<20%
Off-site Soil Area 159	OFS-159-1	OFS-959-1	4-May-10	0	0.2	N	Calcium	10700		5330		mg/kg	**33.5**	Soil - RPD<20%
Off-site Soil Area 159	OFS-159-1	OFS-959-1	4-May-10	0	0.2	N	Chromium	15.7		13		mg/kg	9.4	RPD<20%
Off-site Soil Area 159	OFS-159-1	OFS-959-1	4-May-10	0	0.2	N	Cobalt	15.6		13.7		mg/kg	6.5	RPD<20%
Off-site Soil Area 159	OFS-159-1	OFS-959-1	4-May-10	0	0.2	N	Copper	38.7		37		mg/kg	2.2	RPD<20%
Off-site Soil Area 159	OFS-159-1	OFS-959-1	4-May-10	0	0.2	N	Iron	34,300		30,500		mg/kg	5.9	RPD<20%
Off-site Soil Area 159	OFS-159-1	OFS-959-1	4-May-10	0	0.2	N	Lead	10.6		27.2		mg/kg	**43.9**	Soil - RPD<20%
Off-site Soil Area 159	OFS-159-1	OFS-959-1	4-May-10	0	0.2	N	Magnesium	10100		7830		mg/kg	12.7	RPD<20%
Off-site Soil Area 159	OFS-159-1	OFS-959-1	4-May-10	0	0.2	N	Manganese	817		701		mg/kg	7.6	RPD<20%
Off-site Soil Area 159	OFS-159-1	OFS-959-1	4-May-10	0	0.2	N	Mercury	0.16		0.13		mg/kg	10.3	RPD<20%
Off-site Soil Area 159	OFS-159-1	OFS-959-1	4-May-10	0	0.2	N	Nickel	20		12		mg/kg	**23.7**	Soil - RPD<20%
Off-site Soil Area 159	OFS-159-1	OFS-959-1	4-May-10	0	0.2	N	Potassium	1730	J+	1640	J+	mg/kg	2.7	RPD<20%
Off-site Soil Area 159	OFS-159-1	OFS-959-1	4-May-10	0	0.2	N	Sodium	182	J	134	J	mg/kg	15.2	RPD<20%
Off-site Soil Area 159	OFS-159-1	OFS-959-1	4-May-10	0	0.2	N	Vanadium	64		52		mg/kg	10.5	RPD<20%
Off-site Soil Area 159	OFS-159-1	OFS-959-1	4-May-10	0	0.2	N	Zinc	75	J	150	J	mg/kg	**33.5**	Soil - RPD<20%
Off-site Soil Area 160	OFS-160-1	OFS-960-1	4-May-10	0	0.2	N	Aluminum	11,900		11,600		mg/kg	1.3	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 160	OFS-160-1	OFS-960-1	4-May-10	0	0.2	N	Antimony	0.78	J	0.77	J	mg/kg	0.6	RPD<20%
Off-site Soil Area 160	OFS-160-1	OFS-960-1	4-May-10	0	0.2	N	Arsenic	30.7		32.9		mg/kg	3.5	RPD<20%
Off-site Soil Area 160	OFS-160-1	OFS-960-1	4-May-10	0	0.2	N	Barium	329		309		mg/kg	3.1	RPD<20%
Off-site Soil Area 160	OFS-160-1	OFS-960-1	4-May-10	0	0.2	N	Cadmium	2		1.9		mg/kg	2.6	RPD<20%
Off-site Soil Area 160	OFS-160-1	OFS-960-1	4-May-10	0	0.2	N	Calcium	4460		4620		mg/kg	1.8	RPD<20%
Off-site Soil Area 160	OFS-160-1	OFS-960-1	4-May-10	0	0.2	N	Chromium	30.6		28.2		mg/kg	4.1	RPD<20%
Off-site Soil Area 160	OFS-160-1	OFS-960-1	4-May-10	0	0.2	N	Cobalt	16		13		mg/kg	8.7	RPD<20%
Off-site Soil Area 160	OFS-160-1	OFS-960-1	4-May-10	0	0.2	N	Copper	122		111		mg/kg	4.7	RPD<20%
Off-site Soil Area 160	OFS-160-1	OFS-960-1	4-May-10	0	0.2	N	Cyanide	1	J	0	J	mg/kg	**24.4**	Soil - RPD<20%
Off-site Soil Area 160	OFS-160-1	OFS-960-1	4-May-10	0	0.2	N	Iron	28900		28900		mg/kg	0.0	RPD<20%
Off-site Soil Area 160	OFS-160-1	OFS-960-1	4-May-10	0	0.2	N	Lead	45.8		44.8		mg/kg	1.1	RPD<20%
Off-site Soil Area 160	OFS-160-1	OFS-960-1	4-May-10	0	0.2	N	Magnesium	5410		5120		mg/kg	2.8	RPD<20%
Off-site Soil Area 160	OFS-160-1	OFS-960-1	4-May-10	0	0.2	N	Manganese	3170		2750		mg/kg	7.1	RPD<20%
Off-site Soil Area 160	OFS-160-1	OFS-960-1	4-May-10	0	0.2	N	Nickel	27		25.3		mg/kg	3.3	RPD<20%
Off-site Soil Area 160	OFS-160-1	OFS-960-1	4-May-10	0	0.2	N	Potassium	4,050	J	3,940	J	mg/kg	1.4	RPD<20%
Off-site Soil Area 160	OFS-160-1	OFS-960-1	4-May-10	0	0.2	N	Selenium	1	J	1	J	mg/kg	16.9	RPD<20%
Off-site Soil Area 160	OFS-160-1	OFS-960-1	4-May-10	0	0.2	N	Silver	0	J-	0	J-	mg/kg	8.8	RPD<20%
Off-site Soil Area 160	OFS-160-1	OFS-960-1	4-May-10	0	0.2	N	Thallium	2.5		2.2	J	mg/kg	6.4	RPD<20%
Off-site Soil Area 160	OFS-160-1	OFS-960-1	4-May-10	0	0.2	N	Vanadium	60.3		58.5		mg/kg	1.5	RPD<20%
Off-site Soil Area 160	OFS-160-1	OFS-960-1	4-May-10	0	0.2	N	Zinc	106		106		mg/kg	0.0	RPD<20%
Off-site Soil Area 161	OFS-161-1	OFS-961-1	4-May-10	0	0.2	N	Aluminum	15800		17200		mg/kg	4.2	RPD<20%
Off-site Soil Area 161	OFS-161-1	OFS-961-1	4-May-10	0	0.2	N	Arsenic	24.2		21.1		mg/kg	6.8	RPD<20%
Off-site Soil Area 161	OFS-161-1	OFS-961-1	4-May-10	0	0.2	N	Barium	229		229		mg/kg	0.0	RPD<20%
Off-site Soil Area 161	OFS-161-1	OFS-961-1	4-May-10	0	0.2	N	Cadmium	1.5		1.7		mg/kg	6.3	RPD<20%
Off-site Soil Area 161	OFS-161-1	OFS-961-1	4-May-10	0	0.2	N	Calcium	6100		6110		mg/kg	0.1	RPD<20%
Off-site Soil Area 161	OFS-161-1	OFS-961-1	4-May-10	0	0.2	N	Chromium	23		25		mg/kg	3.7	RPD<20%
Off-site Soil Area 161	OFS-161-1	OFS-961-1	4-May-10	0	0.2	N	Cobalt	17		13		mg/kg	15.8	RPD<20%
Off-site Soil Area 161	OFS-161-1	OFS-961-1	4-May-10	0	0.2	N	Copper	94.5		105		mg/kg	5.3	RPD<20%
Off-site Soil Area 161	OFS-161-1	OFS-961-1	4-May-10	0	0.2	N	Iron	22300		23700		mg/kg	3.0	RPD<20%
Off-site Soil Area 161	OFS-161-1	OFS-961-1	4-May-10	0	0.2	N	Lead	28.3		27.1		mg/kg	2.2	RPD<20%
Off-site Soil Area 161	OFS-161-1	OFS-961-1	4-May-10	0	0.2	N	Magnesium	6330		7090		mg/kg	5.7	RPD<20%
Off-site Soil Area 161	OFS-161-1	OFS-961-1	4-May-10	0	0.2	N	Manganese	1080		1150		mg/kg	3.1	RPD<20%
Off-site Soil Area 161	OFS-161-1	OFS-961-1	4-May-10	0	0.2	N	Mercury	0		0	J	mg/kg	**22.8**	Soil - RPD<20%
Off-site Soil Area 161	OFS-161-1	OFS-961-1	4-May-10	0	0.2	N	Nickel	34.1		34.9		mg/kg	1.2	RPD<20%
Off-site Soil Area 161	OFS-161-1	OFS-961-1	4-May-10	0	0.2	N	Potassium	3010	J	3220	J	mg/kg	3.4	RPD<20%
Off-site Soil Area 161	OFS-161-1	OFS-961-1	4-May-10	0	0.2	N	Selenium	0.88	J	0.81	J	mg/kg	4.1	RPD<20%
Off-site Soil Area 161	OFS-161-1	OFS-961-1	4-May-10	0	0.2	N	Thallium	0.85	J	1.6	J	mg/kg	**30.6**	Soil - RPD<20%
Off-site Soil Area 161	OFS-161-1	OFS-961-1	4-May-10	0	0.2	N	Vanadium	40		42		mg/kg	2.2	RPD<20%
Off-site Soil Area 161	OFS-161-1	OFS-961-1	4-May-10	0	0.2	N	Zinc	136		150		mg/kg	4.9	RPD<20%
Off-site Soil Area 162	OFS-162-1	OFS-962-1	4-May-10	0	0.2	N	Aluminum	12400		12200		mg/kg	0.8	RPD<20%
Off-site Soil Area 162	OFS-162-1	OFS-962-1	4-May-10	0	0.2	N	Arsenic	7		7		mg/kg	0.8	RPD<20%
Off-site Soil Area 162	OFS-162-1	OFS-962-1	4-May-10	0	0.2	N	Barium	165		162		mg/kg	0.9	RPD<20%
Off-site Soil Area 162	OFS-162-1	OFS-962-1	4-May-10	0	0.2	N	Cadmium	0.93	J	0.86	J	mg/kg	3.9	RPD<20%
Off-site Soil Area 162	OFS-162-1	OFS-962-1	4-May-10	0	0.2	N	Calcium	5560		5090		mg/kg	4.4	RPD<20%
Off-site Soil Area 162	OFS-162-1	OFS-962-1	4-May-10	0	0.2	N	Chromium	15.9		14.2		mg/kg	5.6	RPD<20%
Off-site Soil Area 162	OFS-162-1	OFS-962-1	4-May-10	0	0.2	N	Cobalt	7.1		6.2		mg/kg	6.8	RPD<20%
Off-site Soil Area 162	OFS-162-1	OFS-962-1	4-May-10	0	0.2	N	Copper	33		29		mg/kg	6.5	RPD<20%
Off-site Soil Area 162	OFS-162-1	OFS-962-1	4-May-10	0	0.2	N	Iron	16,200		15,700		mg/kg	1.6	RPD<20%
Off-site Soil Area 162	OFS-162-1	OFS-962-1	4-May-10	0	0.2	N	Lead	9		7.5		mg/kg	9.1	RPD<20%
Off-site Soil Area 162	OFS-162-1	OFS-962-1	4-May-10	0	0.2	N	Magnesium	5300		5260		mg/kg	0.4	RPD<20%
Off-site Soil Area 162	OFS-162-1	OFS-962-1	4-May-10	0	0.2	N	Manganese	523	J	475	J	mg/kg	4.8	RPD<20%
Off-site Soil Area 162	OFS-162-1	OFS-962-1	4-May-10	0	0.2	N	Nickel	14.9		14.1		mg/kg	2.8	RPD<20%
Off-site Soil Area 162	OFS-162-1	OFS-962-1	4-May-10	0	0.2	N	Potassium	1870	J	2180	J	mg/kg	7.7	RPD<20%
Off-site Soil Area 162	OFS-162-1	OFS-962-1	4-May-10	0	0.2	N	Sodium	63.8	J	75.5	J	mg/kg	8.4	RPD<20%
Off-site Soil Area 162	OFS-162-1	OFS-962-1	4-May-10	0	0.2	N	Thallium	0.95	J	1.3	J	mg/kg	15.6	RPD<20%
Off-site Soil Area 162	OFS-162-1	OFS-962-1	4-May-10	0	0.2	N	Vanadium	29.8		28.2		mg/kg	2.8	RPD<20%
Off-site Soil Area 162	OFS-162-1	OFS-962-1	4-May-10	0	0.2	N	Zinc	107	J-	82.2	J-	mg/kg	13.1	RPD<20%
Off-site Soil Area 163	OFS-163-1	OFS-963-1	4-May-10	0	0.2	N	Aluminum	11500		11900		mg/kg	1.7	RPD<20%
Off-site Soil Area 163	OFS-163-1	OFS-963-1	4-May-10	0	0.2	N	Arsenic	13.4		15.1		mg/kg	6.0	RPD<20%
Off-site Soil Area 163	OFS-163-1	OFS-963-1	4-May-10	0	0.2	N	Barium	168		213		mg/kg	11.8	RPD<20%
Off-site Soil Area 163	OFS-163-1	OFS-963-1	4-May-10	0	0.2	N	Cadmium	1.4	J	1.5	J	mg/kg	3.4	RPD<20%
Off-site Soil Area 163	OFS-163-1	OFS-963-1	4-May-10	0	0.2	N	Calcium	5180		6070		mg/kg	7.9	RPD<20%
Off-site Soil Area 163	OFS-163-1	OFS-963-1	4-May-10	0	0.2	N	Chromium	19.5		20.5		mg/kg	2.5	RPD<20%
Off-site Soil Area 163	OFS-163-1	OFS-963-1	4-May-10	0	0.2	N	Cobalt	9.5		11.3		mg/kg	8.7	RPD<20%
Off-site Soil Area 163	OFS-163-1	OFS-963-1	4-May-10	0	0.2	N	Copper	73.4		75.8		mg/kg	1.6	RPD<20%
Off-site Soil Area 163	OFS-163-1	OFS-963-1	4-May-10	0	0.2	N	Iron	18500		19300		mg/kg	2.1	RPD<20%
Off-site Soil Area 163	OFS-163-1	OFS-963-1	4-May-10	0	0.2	N	Lead	32.8		50.1		mg/kg	**20.9**	Soil - RPD<20%
Off-site Soil Area 163	OFS-163-1	OFS-963-1	4-May-10	0	0.2	N	Magnesium	5160		5700		mg/kg	5.0	RPD<20%
Off-site Soil Area 163	OFS-163-1	OFS-963-1	4-May-10	0	0.2	N	Manganese	981	J	1,270	J	mg/kg	12.8	RPD<20%
Off-site Soil Area 163	OFS-163-1	OFS-963-1	4-May-10	0	0.2	N	Mercury	0.084	J	0.079	J	mg/kg	3.1	RPD<20%
Off-site Soil Area 163	OFS-163-1	OFS-963-1	4-May-10	0	0.2	N	Nickel	20.1		22.2		mg/kg	5.0	RPD<20%
Off-site Soil Area 163	OFS-163-1	OFS-963-1	4-May-10	0	0.2	N	Potassium	4180	J	4400	J	mg/kg	2.6	RPD<20%
Off-site Soil Area 163	OFS-163-1	OFS-963-1	4-May-10	0	0.2	N	Sodium	61.1	J	64.7	J	mg/kg	2.9	RPD<20%
Off-site Soil Area 163	OFS-163-1	OFS-963-1	4-May-10	0	0.2	N	Thallium	0.81	J	1.6	J	mg/kg	**32.8**	Soil - RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 163	OFS-163-1	OFS-963-1	4-May-10	0	0.2	N	Vanadium	35		39		mg/kg	6.1	RPD<20%
Off-site Soil Area 163	OFS-163-1	OFS-963-1	4-May-10	0	0.2	N	Zinc	139	J-	146	J-	mg/kg	2.5	RPD<20%
Off-site Soil Area 164	OFS-164-1	OFS-964-1	4-May-10	0	0.2	N	Aluminum	12,700		13,600		mg/kg	3.4	RPD<20%
Off-site Soil Area 164	OFS-164-1	OFS-964-1	4-May-10	0	0.2	N	Antimony	29.1	J	1.3	J	mg/kg	**91.4**	Soil - RPD<20%
Off-site Soil Area 164	OFS-164-1	OFS-964-1	4-May-10	0	0.2	N	Arsenic	69		68		mg/kg	1.2	RPD<20%
Off-site Soil Area 164	OFS-164-1	OFS-964-1	4-May-10	0	0.2	N	Barium	149		157		mg/kg	2.6	RPD<20%
Off-site Soil Area 164	OFS-164-1	OFS-964-1	4-May-10	0	0.2	N	Cadmium	2.9		2.7		mg/kg	3.6	RPD<20%
Off-site Soil Area 164	OFS-164-1	OFS-964-1	4-May-10	0	0.2	N	Calcium	8070		8340		mg/kg	1.6	RPD<20%
Off-site Soil Area 164	OFS-164-1	OFS-964-1	4-May-10	0	0.2	N	Chromium	14.8		16.4		mg/kg	5.1	RPD<20%
Off-site Soil Area 164	OFS-164-1	OFS-964-1	4-May-10	0	0.2	N	Cobalt	9.7		9.5		mg/kg	1.0	RPD<20%
Off-site Soil Area 164	OFS-164-1	OFS-964-1	4-May-10	0	0.2	N	Copper	116		102		mg/kg	6.4	RPD<20%
Off-site Soil Area 164	OFS-164-1	OFS-964-1	4-May-10	0	0.2	N	Iron	23400		24200		mg/kg	1.7	RPD<20%
Off-site Soil Area 164	OFS-164-1	OFS-964-1	4-May-10	0	0.2	N	Lead	1120	J	156	J	mg/kg	**75.5**	Soil - RPD<20%
Off-site Soil Area 164	OFS-164-1	OFS-964-1	4-May-10	0	0.2	N	Magnesium	5,680		6,050		mg/kg	3.2	RPD<20%
Off-site Soil Area 164	OFS-164-1	OFS-964-1	4-May-10	0	0.2	N	Manganese	644		632		mg/kg	0.9	RPD<20%
Off-site Soil Area 164	OFS-164-1	OFS-964-1	4-May-10	0	0.2	N	Mercury	0.36		0.35		mg/kg	1.4	RPD<20%
Off-site Soil Area 164	OFS-164-1	OFS-964-1	4-May-10	0	0.2	N	Nickel	14.3		15.6		mg/kg	4.3	RPD<20%
Off-site Soil Area 164	OFS-164-1	OFS-964-1	4-May-10	0	0.2	N	Potassium	2670		2940		mg/kg	4.8	RPD<20%
Off-site Soil Area 164	OFS-164-1	OFS-964-1	4-May-10	0	0.2	N	Selenium	1.3	J	0.74	J	mg/kg	**27.5**	Soil - RPD<20%
Off-site Soil Area 164	OFS-164-1	OFS-964-1	4-May-10	0	0.2	N	Silver	0.62	J	0.43	J	mg/kg	18.1	RPD<20%
Off-site Soil Area 164	OFS-164-1	OFS-964-1	4-May-10	0	0.2	N	Sodium	85	J	87	J	mg/kg	1.2	RPD<20%
Off-site Soil Area 164	OFS-164-1	OFS-964-1	4-May-10	0	0.2	N	Vanadium	34		35		mg/kg	2.3	RPD<20%
Off-site Soil Area 164	OFS-164-1	OFS-964-1	4-May-10	0	0.2	N	Zinc	721		623		mg/kg	7.3	RPD<20%
Off-site Soil Area 165	OFS-165-1	OFS-965-1	4-May-10	0	0.2	N	Aluminum	12300		13800		mg/kg	5.7	RPD<20%
Off-site Soil Area 165	OFS-165-1	OFS-965-1	4-May-10	0	0.2	N	Antimony	0.96	J	1.2	J	mg/kg	11.1	RPD<20%
Off-site Soil Area 165	OFS-165-1	OFS-965-1	4-May-10	0	0.2	N	Arsenic	17.8		20.2		mg/kg	6.3	RPD<20%
Off-site Soil Area 165	OFS-165-1	OFS-965-1	4-May-10	0	0.2	N	Barium	152		183		mg/kg	9.3	RPD<20%
Off-site Soil Area 165	OFS-165-1	OFS-965-1	4-May-10	0	0.2	N	Cadmium	1.2		1.2		mg/kg	0.0	RPD<20%
Off-site Soil Area 165	OFS-165-1	OFS-965-1	4-May-10	0	0.2	N	Calcium	6340		6670		mg/kg	2.5	RPD<20%
Off-site Soil Area 165	OFS-165-1	OFS-965-1	4-May-10	0	0.2	N	Chromium	17.7		19.3		mg/kg	4.3	RPD<20%
Off-site Soil Area 165	OFS-165-1	OFS-965-1	4-May-10	0	0.2	N	Cobalt	10.4		11.8		mg/kg	6.3	RPD<20%
Off-site Soil Area 165	OFS-165-1	OFS-965-1	4-May-10	0	0.2	N	Copper	95.4		101	J	mg/kg	2.9	RPD<20%
Off-site Soil Area 165	OFS-165-1	OFS-965-1	4-May-10	0	0.2	N	Iron	22,100		23,400		mg/kg	2.9	RPD<20%
Off-site Soil Area 165	OFS-165-1	OFS-965-1	4-May-10	0	0.2	N	Lead	36.9	J	62		mg/kg	**25.4**	Soil - RPD<20%
Off-site Soil Area 165	OFS-165-1	OFS-965-1	4-May-10	0	0.2	N	Magnesium	5990		6880		mg/kg	6.9	RPD<20%
Off-site Soil Area 165	OFS-165-1	OFS-965-1	4-May-10	0	0.2	N	Manganese	829		962		mg/kg	7.4	RPD<20%
Off-site Soil Area 165	OFS-165-1	OFS-965-1	4-May-10	0	0.2	N	Mercury	0.16		0.1	J	mg/kg	**23.1**	Soil - RPD<20%
Off-site Soil Area 165	OFS-165-1	OFS-965-1	4-May-10	0	0.2	N	Nickel	17.9		20.7		mg/kg	7.3	RPD<20%
Off-site Soil Area 165	OFS-165-1	OFS-965-1	4-May-10	0	0.2	N	Potassium	3370		4140		mg/kg	10.3	RPD<20%
Off-site Soil Area 165	OFS-165-1	OFS-965-1	4-May-10	0	0.2	N	Silver	0.12	J	0.097	J	mg/kg	10.6	RPD<20%
Off-site Soil Area 165	OFS-165-1	OFS-965-1	4-May-10	0	0.2	N	Sodium	80.5	J	89.8	J	mg/kg	5.5	RPD<20%
Off-site Soil Area 165	OFS-165-1	OFS-965-1	4-May-10	0	0.2	N	Vanadium	36.9		41.5		mg/kg	5.9	RPD<20%
Off-site Soil Area 165	OFS-165-1	OFS-965-1	4-May-10	0	0.2	N	Zinc	196		150		mg/kg	13.3	RPD<20%
Off-site Soil Area 166	OFS-166-1	OFS-966-1	5-May-10	0	0.2	N	Aluminum	14500		16200		mg/kg	5.5	RPD<20%
Off-site Soil Area 166	OFS-166-1	OFS-966-1	5-May-10	0	0.2	N	Antimony	0.71	J	0.7	J	mg/kg	2.9	RPD<20%
Off-site Soil Area 166	OFS-166-1	OFS-966-1	5-May-10	0	0.2	N	Arsenic	23.4	J	16	J	mg/kg	18.8	RPD<20%
Off-site Soil Area 166	OFS-166-1	OFS-966-1	5-May-10	0	0.2	N	Barium	137		171		mg/kg	11.0	RPD<20%
Off-site Soil Area 166	OFS-166-1	OFS-966-1	5-May-10	0	0.2	N	Beryllium	0.47	J	0.56		mg/kg	8.7	RPD<20%
Off-site Soil Area 166	OFS-166-1	OFS-966-1	5-May-10	0	0.2	N	Cadmium	0.16	J	0.13	J	mg/kg	10.3	RPD<20%
Off-site Soil Area 166	OFS-166-1	OFS-966-1	5-May-10	0	0.2	N	Calcium	4,560		4,880		mg/kg	3.4	RPD<20%
Off-site Soil Area 166	OFS-166-1	OFS-966-1	5-May-10	0	0.2	N	Chromium	18		15		mg/kg	9.3	RPD<20%
Off-site Soil Area 166	OFS-166-1	OFS-966-1	5-May-10	0	0.2	N	Cobalt	11.1		11.1		mg/kg	0.0	RPD<20%
Off-site Soil Area 166	OFS-166-1	OFS-966-1	5-May-10	0	0.2	N	Copper	32		30.1		mg/kg	3.1	RPD<20%
Off-site Soil Area 166	OFS-166-1	OFS-966-1	5-May-10	0	0.2	N	Iron	26300		26800		mg/kg	0.9	RPD<20%
Off-site Soil Area 166	OFS-166-1	OFS-966-1	5-May-10	0	0.2	N	Lead	13	J	10.1	J	mg/kg	12.6	RPD<20%
Off-site Soil Area 166	OFS-166-1	OFS-966-1	5-May-10	0	0.2	N	Magnesium	5440		5120		mg/kg	3.0	RPD<20%
Off-site Soil Area 166	OFS-166-1	OFS-966-1	5-May-10	0	0.2	N	Manganese	479		476		mg/kg	0.3	RPD<20%
Off-site Soil Area 166	OFS-166-1	OFS-966-1	5-May-10	0	0.2	N	Nickel	14.5		12.3		mg/kg	8.2	RPD<20%
Off-site Soil Area 166	OFS-166-1	OFS-966-1	5-May-10	0	0.2	N	Potassium	1680	J+	1510	J+	mg/kg	5.3	RPD<20%
Off-site Soil Area 166	OFS-166-1	OFS-966-1	5-May-10	0	0.2	N	Sodium	133	J	140	J	mg/kg	2.6	RPD<20%
Off-site Soil Area 166	OFS-166-1	OFS-966-1	5-May-10	0	0.2	N	Vanadium	43		45		mg/kg	2.5	RPD<20%
Off-site Soil Area 166	OFS-166-1	OFS-966-1	5-May-10	0	0.2	N	Zinc	74.3		52.7		mg/kg	17.0	RPD<20%
Off-site Soil Area 167	OFS-167-1	OFS-967-1	5-May-10	0	0.2	N	Aluminum	29,000		27,500		mg/kg	2.7	RPD<20%
Off-site Soil Area 167	OFS-167-1	OFS-967-1	5-May-10	0	0.2	N	Antimony	0.91	J	1	J	mg/kg	4.7	RPD<20%
Off-site Soil Area 167	OFS-167-1	OFS-967-1	5-May-10	0	0.2	N	Arsenic	57	J	51.9	J	mg/kg	4.7	RPD<20%
Off-site Soil Area 167	OFS-167-1	OFS-967-1	5-May-10	0	0.2	N	Barium	862		751		mg/kg	6.9	RPD<20%
Off-site Soil Area 167	OFS-167-1	OFS-967-1	5-May-10	0	0.2	N	Beryllium	1		1		mg/kg	6.3	RPD<20%
Off-site Soil Area 167	OFS-167-1	OFS-967-1	5-May-10	0	0.2	N	Cadmium	3		3		mg/kg	0.0	RPD<20%
Off-site Soil Area 167	OFS-167-1	OFS-967-1	5-May-10	0	0.2	N	Calcium	14100		14500		mg/kg	1.4	RPD<20%
Off-site Soil Area 167	OFS-167-1	OFS-967-1	5-May-10	0	0.2	N	Chromium	52		48		mg/kg	4.7	RPD<20%
Off-site Soil Area 167	OFS-167-1	OFS-967-1	5-May-10	0	0.2	N	Cobalt	27.8		26.3		mg/kg	2.8	RPD<20%
Off-site Soil Area 167	OFS-167-1	OFS-967-1	5-May-10	0	0.2	N	Copper	361		348		mg/kg	1.8	RPD<20%
Off-site Soil Area 167	OFS-167-1	OFS-967-1	5-May-10	0	0.2	N	Iron	32100		29900		mg/kg	3.5	RPD<20%
Off-site Soil Area 167	OFS-167-1	OFS-967-1	5-May-10	0	0.2	N	Lead	166	J	149	J	mg/kg	5.4	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 167	OFS-167-1	OFS-967-1	5-May-10	0	0.2	N	Magnesium	17,100		18,000		mg/kg	2.6	RPD<20%
Off-site Soil Area 167	OFS-167-1	OFS-967-1	5-May-10	0	0.2	N	Manganese	930		876		mg/kg	3.0	RPD<20%
Off-site Soil Area 167	OFS-167-1	OFS-967-1	5-May-10	0	0.2	N	Mercury	0		0		mg/kg	12.0	RPD<20%
Off-site Soil Area 167	OFS-167-1	OFS-967-1	5-May-10	0	0.2	N	Nickel	141		147		mg/kg	2.1	RPD<20%
Off-site Soil Area 167	OFS-167-1	OFS-967-1	5-May-10	0	0.2	N	Potassium	3,560	J+	3,050	J+	mg/kg	7.7	RPD<20%
Off-site Soil Area 167	OFS-167-1	OFS-967-1	5-May-10	0	0.2	N	Silver	1.1		0.97	J	mg/kg	6.3	RPD<20%
Off-site Soil Area 167	OFS-167-1	OFS-967-1	5-May-10	0	0.2	N	Sodium	824		1350		mg/kg	**24.2**	Soil - RPD<20%
Off-site Soil Area 167	OFS-167-1	OFS-967-1	5-May-10	0	0.2	N	Vanadium	58		52.5		mg/kg	5.0	RPD<20%
Off-site Soil Area 167	OFS-167-1	OFS-967-1	5-May-10	0	0.2	N	Zinc	264		249		mg/kg	2.9	RPD<20%
Off-site Soil Area 168	OFS-168-1	OFS-968-1	4-May-10	0	0.2	N	Aluminum	12500		12200		mg/kg	1.2	RPD<20%
Off-site Soil Area 168	OFS-168-1	OFS-968-1	4-May-10	0	0.2	N	Antimony	1	J	1	J	mg/kg	4.3	RPD<20%
Off-site Soil Area 168	OFS-168-1	OFS-968-1	4-May-10	0	0.2	N	Arsenic	26.5		23.6		mg/kg	5.8	RPD<20%
Off-site Soil Area 168	OFS-168-1	OFS-968-1	4-May-10	0	0.2	N	Barium	212		208		mg/kg	1.0	RPD<20%
Off-site Soil Area 168	OFS-168-1	OFS-968-1	4-May-10	0	0.2	N	Beryllium	0.62		0.41	J	mg/kg	**20.4**	Soil - RPD<20%
Off-site Soil Area 168	OFS-168-1	OFS-968-1	4-May-10	0	0.2	N	Cadmium	2		2		mg/kg	3.0	RPD<20%
Off-site Soil Area 168	OFS-168-1	OFS-968-1	4-May-10	0	0.2	N	Calcium	6,870		7,430		mg/kg	3.9	RPD<20%
Off-site Soil Area 168	OFS-168-1	OFS-968-1	4-May-10	0	0.2	N	Chromium	16.4		16.2		mg/kg	0.6	RPD<20%
Off-site Soil Area 168	OFS-168-1	OFS-968-1	4-May-10	0	0.2	N	Cobalt	9.3		7.8		mg/kg	8.8	RPD<20%
Off-site Soil Area 168	OFS-168-1	OFS-968-1	4-May-10	0	0.2	N	Copper	175	J	191.0	J	mg/kg	4.4	RPD<20%
Off-site Soil Area 168	OFS-168-1	OFS-968-1	4-May-10	0	0.2	N	Iron	20500		19300		mg/kg	3.0	RPD<20%
Off-site Soil Area 168	OFS-168-1	OFS-968-1	4-May-10	0	0.2	N	Lead	137		141		mg/kg	1.4	RPD<20%
Off-site Soil Area 168	OFS-168-1	OFS-968-1	4-May-10	0	0.2	N	Magnesium	5560		5420		mg/kg	1.3	RPD<20%
Off-site Soil Area 168	OFS-168-1	OFS-968-1	4-May-10	0	0.2	N	Manganese	615		537		mg/kg	6.8	RPD<20%
Off-site Soil Area 168	OFS-168-1	OFS-968-1	4-May-10	0	0.2	N	Mercury	0.23		0.18		mg/kg	12.2	RPD<20%
Off-site Soil Area 168	OFS-168-1	OFS-968-1	4-May-10	0	0.2	N	Nickel	17		16		mg/kg	3.4	RPD<20%
Off-site Soil Area 168	OFS-168-1	OFS-968-1	4-May-10	0	0.2	N	Potassium	3830		3630		mg/kg	2.7	RPD<20%
Off-site Soil Area 168	OFS-168-1	OFS-968-1	4-May-10	0	0.2	N	Silver	0.57	J	0.61	J	mg/kg	3.4	RPD<20%
Off-site Soil Area 168	OFS-168-1	OFS-968-1	4-May-10	0	0.2	N	Sodium	71.8	J	73.2	J	mg/kg	1.0	RPD<20%
Off-site Soil Area 168	OFS-168-1	OFS-968-1	4-May-10	0	0.2	N	Vanadium	33.6		31.7		mg/kg	2.9	RPD<20%
Off-site Soil Area 168	OFS-168-1	OFS-968-1	4-May-10	0	0.2	N	Zinc	237		242		mg/kg	1.0	RPD<20%
Off-site Soil Area 169	OFS-169-1	OFS-969-1	5-May-10	0	0.2	N	Aluminum	11700		13800		mg/kg	8.2	RPD<20%
Off-site Soil Area 169	OFS-169-1	OFS-969-1	5-May-10	0	0.2	N	Arsenic	13.6	J-	14.3	J-	mg/kg	2.5	RPD<20%
Off-site Soil Area 169	OFS-169-1	OFS-969-1	5-May-10	0	0.2	N	Barium	184		204		mg/kg	5.2	RPD<20%
Off-site Soil Area 169	OFS-169-1	OFS-969-1	5-May-10	0	0.2	N	Cadmium	0.54		1.0		mg/kg	**29.9**	Soil - RPD<20%
Off-site Soil Area 169	OFS-169-1	OFS-969-1	5-May-10	0	0.2	N	Calcium	6660		8780		mg/kg	13.7	RPD<20%
Off-site Soil Area 169	OFS-169-1	OFS-969-1	5-May-10	0	0.2	N	Chromium	19.3		20.4		mg/kg	2.8	RPD<20%
Off-site Soil Area 169	OFS-169-1	OFS-969-1	5-May-10	0	0.2	N	Cobalt	9		10.9		mg/kg	9.5	RPD<20%
Off-site Soil Area 169	OFS-169-1	OFS-969-1	5-May-10	0	0.2	N	Copper	71.5		81.6		mg/kg	6.6	RPD<20%
Off-site Soil Area 169	OFS-169-1	OFS-969-1	5-May-10	0	0.2	N	Iron	18200		20900		mg/kg	6.9	RPD<20%
Off-site Soil Area 169	OFS-169-1	OFS-969-1	5-May-10	0	0.2	N	Lead	22.6		24		mg/kg	3.0	RPD<20%
Off-site Soil Area 169	OFS-169-1	OFS-969-1	5-May-10	0	0.2	N	Magnesium	5230		5750		mg/kg	4.7	RPD<20%
Off-site Soil Area 169	OFS-169-1	OFS-969-1	5-May-10	0	0.2	N	Manganese	803		839		mg/kg	2.2	RPD<20%
Off-site Soil Area 169	OFS-169-1	OFS-969-1	5-May-10	0	0.2	N	Nickel	24.1		28.6		mg/kg	8.5	RPD<20%
Off-site Soil Area 169	OFS-169-1	OFS-969-1	5-May-10	0	0.2	N	Potassium	3180	J+	3850		mg/kg	9.5	RPD<20%
Off-site Soil Area 169	OFS-169-1	OFS-969-1	5-May-10	0	0.2	N	Sodium	78.5	J	94.6	J	mg/kg	9.3	RPD<20%
Off-site Soil Area 169	OFS-169-1	OFS-969-1	5-May-10	0	0.2	N	Vanadium	32.8		37.1		mg/kg	6.2	RPD<20%
Off-site Soil Area 169	OFS-169-1	OFS-969-1	5-May-10	0	0.2	N	Zinc	86		96.7		mg/kg	5.9	RPD<20%
Off-site Soil Area 170	OFS-170-1	OFS-970-1	5-May-10	0	0.2	N	Aluminum	13400		15300		mg/kg	6.6	RPD<20%
Off-site Soil Area 170	OFS-170-1	OFS-970-1	5-May-10	0	0.2	N	Arsenic	18	J-	23	J-	mg/kg	13.0	RPD<20%
Off-site Soil Area 170	OFS-170-1	OFS-970-1	5-May-10	0	0.2	N	Barium	109		129		mg/kg	8.4	RPD<20%
Off-site Soil Area 170	OFS-170-1	OFS-970-1	5-May-10	0	0.2	N	Beryllium	0.17	J	0.23	J	mg/kg	15.0	RPD<20%
Off-site Soil Area 170	OFS-170-1	OFS-970-1	5-May-10	0	0.2	N	Cadmium	1		1		mg/kg	11.7	RPD<20%
Off-site Soil Area 170	OFS-170-1	OFS-970-1	5-May-10	0	0.2	N	Calcium	10,000		11,200		mg/kg	5.7	RPD<20%
Off-site Soil Area 170	OFS-170-1	OFS-970-1	5-May-10	0	0.2	N	Chromium	17		15		mg/kg	5.8	RPD<20%
Off-site Soil Area 170	OFS-170-1	OFS-970-1	5-May-10	0	0.2	N	Cobalt	12		12.1		mg/kg	0.4	RPD<20%
Off-site Soil Area 170	OFS-170-1	OFS-970-1	5-May-10	0	0.2	N	Copper	31.8		35		mg/kg	4.8	RPD<20%
Off-site Soil Area 170	OFS-170-1	OFS-970-1	5-May-10	0	0.2	N	Iron	24,400		26,200		mg/kg	3.6	RPD<20%
Off-site Soil Area 170	OFS-170-1	OFS-970-1	5-May-10	0	0.2	N	Lead	11		14		mg/kg	11.7	RPD<20%
Off-site Soil Area 170	OFS-170-1	OFS-970-1	5-May-10	0	0.2	N	Magnesium	7,000		7,850		mg/kg	5.7	RPD<20%
Off-site Soil Area 170	OFS-170-1	OFS-970-1	5-May-10	0	0.2	N	Manganese	725		732		mg/kg	0.5	RPD<20%
Off-site Soil Area 170	OFS-170-1	OFS-970-1	5-May-10	0	0.2	N	Nickel	16		15.8		mg/kg	0.6	RPD<20%
Off-site Soil Area 170	OFS-170-1	OFS-970-1	5-May-10	0	0.2	N	Potassium	1460		1880		mg/kg	12.6	RPD<20%
Off-site Soil Area 170	OFS-170-1	OFS-970-1	5-May-10	0	0.2	N	Sodium	80.3	J	70.8	J	mg/kg	6.3	RPD<20%
Off-site Soil Area 170	OFS-170-1	OFS-970-1	5-May-10	0	0.2	N	Vanadium	44.6		47.6		mg/kg	3.3	RPD<20%
Off-site Soil Area 170	OFS-170-1	OFS-970-1	5-May-10	0	0.2	N	Zinc	67.4		78.7		mg/kg	7.7	RPD<20%
Off-site Soil Area 171	OFS-171-1	OFS-971-1	5-May-10	0	0.2	N	Aluminum	11400		10800		mg/kg	2.7	RPD<20%
Off-site Soil Area 171	OFS-171-1	OFS-971-1	5-May-10	0	0.2	N	Antimony	0.98	J	0.92	J	mg/kg	3.2	RPD<20%
Off-site Soil Area 171	OFS-171-1	OFS-971-1	5-May-10	0	0.2	N	Arsenic	79		64		mg/kg	11.1	RPD<20%
Off-site Soil Area 171	OFS-171-1	OFS-971-1	5-May-10	0	0.2	N	Barium	106		103		mg/kg	1.4	RPD<20%
Off-site Soil Area 171	OFS-171-1	OFS-971-1	5-May-10	0	0.2	N	Beryllium	0.35	J	0.29	J	mg/kg	9.4	RPD<20%
Off-site Soil Area 171	OFS-171-1	OFS-971-1	5-May-10	0	0.2	N	Cadmium	1	J	1	J	mg/kg	12.8	RPD<20%
Off-site Soil Area 171	OFS-171-1	OFS-971-1	5-May-10	0	0.2	N	Calcium	4580		4820		mg/kg	2.6	RPD<20%
Off-site Soil Area 171	OFS-171-1	OFS-971-1	5-May-10	0	0.2	N	Chromium	14.4		13.9		mg/kg	1.8	RPD<20%
Off-site Soil Area 171	OFS-171-1	OFS-971-1	5-May-10	0	0.2	N	Cobalt	12		13		mg/kg	5.7	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 171	OFS-171-1	OFS-971-1	5-May-10	0	0.2	N	Copper	49.9		41.2		mg/kg	9.5	RPD<20%
Off-site Soil Area 171	OFS-171-1	OFS-971-1	5-May-10	0	0.2	N	Iron	26000		24800.0		mg/kg	2.4	RPD<20%
Off-site Soil Area 171	OFS-171-1	OFS-971-1	5-May-10	0	0.2	N	Lead	71		56		mg/kg	11.9	RPD<20%
Off-site Soil Area 171	OFS-171-1	OFS-971-1	5-May-10	0	0.2	N	Magnesium	5,640		5,450		mg/kg	1.7	RPD<20%
Off-site Soil Area 171	OFS-171-1	OFS-971-1	5-May-10	0	0.2	N	Manganese	594		623		mg/kg	2.4	RPD<20%
Off-site Soil Area 171	OFS-171-1	OFS-971-1	5-May-10	0	0.2	N	Mercury	0	J	0	J	mg/kg	11.1	RPD<20%
Off-site Soil Area 171	OFS-171-1	OFS-971-1	5-May-10	0	0.2	N	Nickel	13		13		mg/kg	1.2	RPD<20%
Off-site Soil Area 171	OFS-171-1	OFS-971-1	5-May-10	0	0.2	N	Potassium	4170	J+	3540	J+	mg/kg	8.2	RPD<20%
Off-site Soil Area 171	OFS-171-1	OFS-971-1	5-May-10	0	0.2	N	Silver	0.33	J	0.25	J	mg/kg	13.8	RPD<20%
Off-site Soil Area 171	OFS-171-1	OFS-971-1	5-May-10	0	0.2	N	Sodium	176	J	174	J	mg/kg	0.6	RPD<20%
Off-site Soil Area 171	OFS-171-1	OFS-971-1	5-May-10	0	0.2	N	Vanadium	39.9		39		mg/kg	1.1	RPD<20%
Off-site Soil Area 171	OFS-171-1	OFS-971-1	5-May-10	0	0.2	N	Zinc	339		290		mg/kg	7.8	RPD<20%
Off-site Soil Area 172	OFS-172-1	OFS-972-1	5-May-10	0	0.2	N	Aluminum	13400		12900		mg/kg	1.9	RPD<20%
Off-site Soil Area 172	OFS-172-1	OFS-972-1	5-May-10	0	0.2	N	Antimony	0.65	J	0.46	J	mg/kg	17.1	RPD<20%
Off-site Soil Area 172	OFS-172-1	OFS-972-1	5-May-10	0	0.2	N	Arsenic	8		9		mg/kg	8.2	RPD<20%
Off-site Soil Area 172	OFS-172-1	OFS-972-1	5-May-10	0	0.2	N	Barium	126		120		mg/kg	2.4	RPD<20%
Off-site Soil Area 172	OFS-172-1	OFS-972-1	5-May-10	0	0.2	N	Beryllium	0.42	J	0.35	J	mg/kg	9.1	RPD<20%
Off-site Soil Area 172	OFS-172-1	OFS-972-1	5-May-10	0	0.2	N	Calcium	7270		8920		mg/kg	10.2	RPD<20%
Off-site Soil Area 172	OFS-172-1	OFS-972-1	5-May-10	0	0.2	N	Chromium	12.6		13.2		mg/kg	2.3	RPD<20%
Off-site Soil Area 172	OFS-172-1	OFS-972-1	5-May-10	0	0.2	N	Cobalt	14		14		mg/kg	0.4	RPD<20%
Off-site Soil Area 172	OFS-172-1	OFS-972-1	5-May-10	0	0.2	N	Copper	25.9		28.3		mg/kg	4.4	RPD<20%
Off-site Soil Area 172	OFS-172-1	OFS-972-1	5-May-10	0	0.2	N	Iron	24200		23000		mg/kg	2.5	RPD<20%
Off-site Soil Area 172	OFS-172-1	OFS-972-1	5-May-10	0	0.2	N	Lead	8		6.7		mg/kg	8.8	RPD<20%
Off-site Soil Area 172	OFS-172-1	OFS-972-1	5-May-10	0	0.2	N	Magnesium	6760		6660		mg/kg	0.7	RPD<20%
Off-site Soil Area 172	OFS-172-1	OFS-972-1	5-May-10	0	0.2	N	Manganese	805		705		mg/kg	6.6	RPD<20%
Off-site Soil Area 172	OFS-172-1	OFS-972-1	5-May-10	0	0.2	N	Nickel	12.4		12.5		mg/kg	0.4	RPD<20%
Off-site Soil Area 172	OFS-172-1	OFS-972-1	5-May-10	0	0.2	N	Potassium	1340	J+	1280	J+	mg/kg	2.3	RPD<20%
Off-site Soil Area 172	OFS-172-1	OFS-972-1	5-May-10	0	0.2	N	Sodium	116	J	157	J	mg/kg	15.0	RPD<20%
Off-site Soil Area 172	OFS-172-1	OFS-972-1	5-May-10	0	0.2	N	Vanadium	40		39		mg/kg	1.1	RPD<20%
Off-site Soil Area 172	OFS-172-1	OFS-972-1	5-May-10	0	0.2	N	Zinc	77.3		51.4		mg/kg	**20.1**	Soil - RPD<20%
Off-site Soil Area 173	OFS-173-1	OFS-973-1	5-May-10	0	0.2	N	Aluminum	21200.0		24500		mg/kg	7.2	RPD<20%
Off-site Soil Area 173	OFS-173-1	OFS-973-1	5-May-10	0	0.2	N	Antimony	0.57	J	0.82	J	mg/kg	18.0	RPD<20%
Off-site Soil Area 173	OFS-173-1	OFS-973-1	5-May-10	0	0.2	N	Arsenic	20.9		23.6		mg/kg	6.1	RPD<20%
Off-site Soil Area 173	OFS-173-1	OFS-973-1	5-May-10	0	0.2	N	Barium	294		309		mg/kg	2.5	RPD<20%
Off-site Soil Area 173	OFS-173-1	OFS-973-1	5-May-10	0	0.2	N	Beryllium	0.62		0.7		mg/kg	6.1	RPD<20%
Off-site Soil Area 173	OFS-173-1	OFS-973-1	5-May-10	0	0.2	N	Cadmium	0.56	J	0.45	J	mg/kg	10.9	RPD<20%
Off-site Soil Area 173	OFS-173-1	OFS-973-1	5-May-10	0	0.2	N	Calcium	6870		6880		mg/kg	0.1	RPD<20%
Off-site Soil Area 173	OFS-173-1	OFS-973-1	5-May-10	0	0.2	N	Chromium	38.2		44.9		mg/kg	8.1	RPD<20%
Off-site Soil Area 173	OFS-173-1	OFS-973-1	5-May-10	0	0.2	N	Cobalt	18.6		20.2		mg/kg	4.1	RPD<20%
Off-site Soil Area 173	OFS-173-1	OFS-973-1	5-May-10	0	0.2	N	Copper	124	J	121	J	mg/kg	1.2	RPD<20%
Off-site Soil Area 173	OFS-173-1	OFS-973-1	5-May-10	0	0.2	N	Iron	33100		38500		mg/kg	7.5	RPD<20%
Off-site Soil Area 173	OFS-173-1	OFS-973-1	5-May-10	0	0.2	N	Lead	23.3		21.3		mg/kg	4.5	RPD<20%
Off-site Soil Area 173	OFS-173-1	OFS-973-1	5-May-10	0	0.2	N	Magnesium	9280		10900		mg/kg	8.0	RPD<20%
Off-site Soil Area 173	OFS-173-1	OFS-973-1	5-May-10	0	0.2	N	Manganese	1,820		1,840		mg/kg	0.5	RPD<20%
Off-site Soil Area 173	OFS-173-1	OFS-973-1	5-May-10	0	0.2	N	Nickel	37.1		42.2		mg/kg	6.4	RPD<20%
Off-site Soil Area 173	OFS-173-1	OFS-973-1	5-May-10	0	0.2	N	Potassium	2,930	J+	2,860	J+	mg/kg	1.2	RPD<20%
Off-site Soil Area 173	OFS-173-1	OFS-973-1	5-May-10	0	0.2	N	Silver	0.21	J-	0.27	J-	mg/kg	12.5	RPD<20%
Off-site Soil Area 173	OFS-173-1	OFS-973-1	5-May-10	0	0.2	N	Sodium	104	J	117	J	mg/kg	5.9	RPD<20%
Off-site Soil Area 173	OFS-173-1	OFS-973-1	5-May-10	0	0.2	N	Vanadium	65.2		75.7		mg/kg	7.5	RPD<20%
Off-site Soil Area 173	OFS-173-1	OFS-973-1	5-May-10	0	0.2	N	Zinc	91		89		mg/kg	1.1	RPD<20%
Off-site Soil Area 174	OFS-174-1	OFS-974-1	5-May-10	0	0.2	N	Aluminum	21,500		22,500		mg/kg	2.3	RPD<20%
Off-site Soil Area 174	OFS-174-1	OFS-974-1	5-May-10	0	0.2	N	Antimony	0.72	J	0.92	J	mg/kg	12.2	RPD<20%
Off-site Soil Area 174	OFS-174-1	OFS-974-1	5-May-10	0	0.2	N	Arsenic	26		29		mg/kg	4.7	RPD<20%
Off-site Soil Area 174	OFS-174-1	OFS-974-1	5-May-10	0	0.2	N	Barium	258		276		mg/kg	3.4	RPD<20%
Off-site Soil Area 174	OFS-174-1	OFS-974-1	5-May-10	0	0.2	N	Beryllium	1		1		mg/kg	2.2	RPD<20%
Off-site Soil Area 174	OFS-174-1	OFS-974-1	5-May-10	0	0.2	N	Cadmium	0.52	J	0.49	J	mg/kg	3.0	RPD<20%
Off-site Soil Area 174	OFS-174-1	OFS-974-1	5-May-10	0	0.2	N	Calcium	6540		6790		mg/kg	1.9	RPD<20%
Off-site Soil Area 174	OFS-174-1	OFS-974-1	5-May-10	0	0.2	N	Chromium	37.5		40.5		mg/kg	3.8	RPD<20%
Off-site Soil Area 174	OFS-174-1	OFS-974-1	5-May-10	0	0.2	N	Cobalt	19		18		mg/kg	3.0	RPD<20%
Off-site Soil Area 174	OFS-174-1	OFS-974-1	5-May-10	0	0.2	N	Copper	118	J	128	J	mg/kg	4.1	RPD<20%
Off-site Soil Area 174	OFS-174-1	OFS-974-1	5-May-10	0	0.2	N	Iron	34,000		35,200		mg/kg	1.7	RPD<20%
Off-site Soil Area 174	OFS-174-1	OFS-974-1	5-May-10	0	0.2	N	Lead	25		29		mg/kg	6.3	RPD<20%
Off-site Soil Area 174	OFS-174-1	OFS-974-1	5-May-10	0	0.2	N	Magnesium	9110		9420		mg/kg	1.7	RPD<20%
Off-site Soil Area 174	OFS-174-1	OFS-974-1	5-May-10	0	0.2	N	Manganese	1680		1670		mg/kg	0.3	RPD<20%
Off-site Soil Area 174	OFS-174-1	OFS-974-1	5-May-10	0	0.2	N	Mercury	0.06	J	0.047	J	mg/kg	12.1	RPD<20%
Off-site Soil Area 174	OFS-174-1	OFS-974-1	5-May-10	0	0.2	N	Nickel	37.3		37.6		mg/kg	0.4	RPD<20%
Off-site Soil Area 174	OFS-174-1	OFS-974-1	5-May-10	0	0.2	N	Potassium	3320	J+	3240	J+	mg/kg	1.2	RPD<20%
Off-site Soil Area 174	OFS-174-1	OFS-974-1	5-May-10	0	0.2	N	Silver	0.2	J-	0.22	J-	mg/kg	4.8	RPD<20%
Off-site Soil Area 174	OFS-174-1	OFS-974-1	5-May-10	0	0.2	N	Sodium	94	J	103	J	mg/kg	4.6	RPD<20%
Off-site Soil Area 174	OFS-174-1	OFS-974-1	5-May-10	0	0.2	N	Vanadium	68		72		mg/kg	2.7	RPD<20%
Off-site Soil Area 174	OFS-174-1	OFS-974-1	5-May-10	0	0.2	N	Zinc	110		121.0		mg/kg	4.8	RPD<20%
Off-site Soil Area 175	OFS-175-1	OFS-975-1	5-May-10	0	0.2	N	Aluminum	17600		18600		mg/kg	2.8	RPD<20%
Off-site Soil Area 175	OFS-175-1	OFS-975-1	5-May-10	0	0.2	N	Antimony	1	J	1	J	mg/kg	7.2	RPD<20%
Off-site Soil Area 175	OFS-175-1	OFS-975-1	5-May-10	0	0.2	N	Arsenic	13.3		13.3		mg/kg	0.0	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 175	OFS-175-1	OFS-975-1	5-May-10	0	0.2	N	Barium	161		193		mg/kg	9.0	RPD<20%
Off-site Soil Area 175	OFS-175-1	OFS-975-1	5-May-10	0	0.2	N	Beryllium	1		1		mg/kg	2.9	RPD<20%
Off-site Soil Area 175	OFS-175-1	OFS-975-1	5-May-10	0	0.2	N	Cadmium	0.076	J	0.087	J	mg/kg	6.7	RPD<20%
Off-site Soil Area 175	OFS-175-1	OFS-975-1	5-May-10	0	0.2	N	Calcium	8070		8000		mg/kg	0.4	RPD<20%
Off-site Soil Area 175	OFS-175-1	OFS-975-1	5-May-10	0	0.2	N	Chromium	14.4		14.8		mg/kg	1.4	RPD<20%
Off-site Soil Area 175	OFS-175-1	OFS-975-1	5-May-10	0	0.2	N	Cobalt	13.9		13.2		mg/kg	2.6	RPD<20%
Off-site Soil Area 175	OFS-175-1	OFS-975-1	5-May-10	0	0.2	N	Copper	33		34		mg/kg	1.5	RPD<20%
Off-site Soil Area 175	OFS-175-1	OFS-975-1	5-May-10	0	0.2	N	Iron	29000		29100		mg/kg	0.2	RPD<20%
Off-site Soil Area 175	OFS-175-1	OFS-975-1	5-May-10	0	0.2	N	Lead	11		11		mg/kg	1.8	RPD<20%
Off-site Soil Area 175	OFS-175-1	OFS-975-1	5-May-10	0	0.2	N	Magnesium	7270		7610		mg/kg	2.3	RPD<20%
Off-site Soil Area 175	OFS-175-1	OFS-975-1	5-May-10	0	0.2	N	Manganese	755		827		mg/kg	4.6	RPD<20%
Off-site Soil Area 175	OFS-175-1	OFS-975-1	5-May-10	0	0.2	N	Nickel	13		13		mg/kg	1.1	RPD<20%
Off-site Soil Area 175	OFS-175-1	OFS-975-1	5-May-10	0	0.2	N	Potassium	1460	J+	1850	J+	mg/kg	11.8	RPD<20%
Off-site Soil Area 175	OFS-175-1	OFS-975-1	5-May-10	0	0.2	N	Sodium	114	J	105	J	mg/kg	4.1	RPD<20%
Off-site Soil Area 175	OFS-175-1	OFS-975-1	5-May-10	0	0.2	N	Vanadium	49.4		49.1		mg/kg	0.3	RPD<20%
Off-site Soil Area 175	OFS-175-1	OFS-975-1	5-May-10	0	0.2	N	Zinc	64.8		66.7		mg/kg	1.4	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Aluminum	8,180		8,100		mg/kg	0.5	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Antimony	0.66	J	0.6	J	mg/kg	4.8	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Arsenic	18	J	20	J	mg/kg	3.2	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Barium	220		213		mg/kg	1.6	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Beryllium	0.41	J	0.39	J	mg/kg	2.5	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Cadmium	1.7		1.6		mg/kg	3.0	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Calcium	25800		22800		mg/kg	6.2	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Chromium	15.6		14.6		mg/kg	3.3	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Cobalt	7.6		7.3		mg/kg	2.0	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Copper	95	J	96	J	mg/kg	1.0	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Cyanide	0.32	J	0.36	J	mg/kg	5.9	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Iron	12,800		13,000		mg/kg	0.8	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Lead	517	J	443	J	mg/kg	7.7	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Magnesium	5050		5250		mg/kg	1.9	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Manganese	402	J	381	J	mg/kg	2.7	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Mercury	0.24	J+	0.35	J+	mg/kg	18.6	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Nickel	12.3		12.8		mg/kg	2.0	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Potassium	2700	J+	2740	J+	mg/kg	0.7	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Selenium	1.7	J	1.4	J	mg/kg	9.7	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Silver	0.66	J	0.6	J	mg/kg	4.8	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Sodium	249	J	224	J	mg/kg	5.3	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Vanadium	24		23.9		mg/kg	0.2	RPD<20%
Off-site Soil Area 176	OFS-176-1	OFS-976-1	6-May-10	0	0.2	N	Zinc	719		886		mg/kg	10.4	RPD<20%
Off-site Soil Area 177	OFS-177-1	OFS-977-1	6-May-10	0	0.2	N	Aluminum	7510		8050		mg/kg	3.5	RPD<20%
Off-site Soil Area 177	OFS-177-1	OFS-977-1	6-May-10	0	0.2	N	Antimony	0.69	J	0.53	J	mg/kg	13.1	RPD<20%
Off-site Soil Area 177	OFS-177-1	OFS-977-1	6-May-10	0	0.2	N	Arsenic	17.8	J	16.1	J	mg/kg	5.0	RPD<20%
Off-site Soil Area 177	OFS-177-1	OFS-977-1	6-May-10	0	0.2	N	Barium	101		111		mg/kg	4.7	RPD<20%
Off-site Soil Area 177	OFS-177-1	OFS-977-1	6-May-10	0	0.2	N	Cadmium	0.63		0.65		mg/kg	1.6	RPD<20%
Off-site Soil Area 177	OFS-177-1	OFS-977-1	6-May-10	0	0.2	N	Calcium	5360		8060		mg/kg	**20.1**	Soil - RPD<20%
Off-site Soil Area 177	OFS-177-1	OFS-977-1	6-May-10	0	0.2	N	Chromium	11.7		12.1		mg/kg	1.7	RPD<20%
Off-site Soil Area 177	OFS-177-1	OFS-977-1	6-May-10	0	0.2	N	Cobalt	7.8		8.7		mg/kg	5.5	RPD<20%
Off-site Soil Area 177	OFS-177-1	OFS-977-1	6-May-10	0	0.2	N	Copper	86	J	90.8	J	mg/kg	2.7	RPD<20%
Off-site Soil Area 177	OFS-177-1	OFS-977-1	6-May-10	0	0.2	N	Iron	14,400		16,400		mg/kg	6.5	RPD<20%
Off-site Soil Area 177	OFS-177-1	OFS-977-1	6-May-10	0	0.2	N	Lead	67.1	J	95.6	J	mg/kg	17.5	RPD<20%
Off-site Soil Area 177	OFS-177-1	OFS-977-1	6-May-10	0	0.2	N	Magnesium	3,990		4,790		mg/kg	9.1	RPD<20%
Off-site Soil Area 177	OFS-177-1	OFS-977-1	6-May-10	0	0.2	N	Manganese	418	J	440	J	mg/kg	2.6	RPD<20%
Off-site Soil Area 177	OFS-177-1	OFS-977-1	6-May-10	0	0.2	N	Mercury	0.27	J+	0.12	J+	mg/kg	**38.5**	Soil - RPD<20%
Off-site Soil Area 177	OFS-177-1	OFS-977-1	6-May-10	0	0.2	N	Nickel	13.1		16.1		mg/kg	10.3	RPD<20%
Off-site Soil Area 177	OFS-177-1	OFS-977-1	6-May-10	0	0.2	N	Potassium	2,180	J+	2,170	J+	mg/kg	0.2	RPD<20%
Off-site Soil Area 177	OFS-177-1	OFS-977-1	6-May-10	0	0.2	N	Silver	0.27	J	0.3	J	mg/kg	5.3	RPD<20%
Off-site Soil Area 177	OFS-177-1	OFS-977-1	6-May-10	0	0.2	N	Sodium	114	J	114	J	mg/kg	0.0	RPD<20%
Off-site Soil Area 177	OFS-177-1	OFS-977-1	6-May-10	0	0.2	N	Vanadium	26.3		27.7		mg/kg	2.6	RPD<20%
Off-site Soil Area 177	OFS-177-1	OFS-977-1	6-May-10	0	0.2	N	Zinc	152		152		mg/kg	0.0	RPD<20%
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Aluminum	18400		18600		mg/kg	0.5	RPD<20%
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Antimony	0.86	J	0.85	J	mg/kg	0.6	RPD<20%
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Arsenic	39		38		mg/kg	0.4	RPD<20%
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Barium	213		205		mg/kg	1.9	RPD<20%
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Beryllium	0.61		0.6		mg/kg	0.8	RPD<20%
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Cadmium	1.9		2		mg/kg	2.6	RPD<20%
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Calcium	7910		7440		mg/kg	3.1	RPD<20%
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Chromium	23.7		22.2		mg/kg	3.3	RPD<20%
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Cobalt	13.9		14.1		mg/kg	0.7	RPD<20%
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Copper	116		115		mg/kg	0.4	RPD<20%
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Iron	27900		28900		mg/kg	1.8	RPD<20%
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Lead	184		185		mg/kg	0.3	RPD<20%
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Magnesium	7620		7940		mg/kg	2.1	RPD<20%
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Manganese	754		754		mg/kg	0.0	RPD<20%
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Mercury	0		0		mg/kg	**22.6**	Soil - RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Nickel	21.3		20.4		mg/kg	2.2	RPD<20%
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Potassium	4770	J+	4810	J+	mg/kg	0.4	RPD<20%
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Selenium	0.86	J	0.55	J	mg/kg	**22.0**	Soil - RPD<20%
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Silver	0.66	J	0.66	J	mg/kg	0.0	RPD<20%
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Sodium	175	J	167	J	mg/kg	2.3	RPD<20%
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Vanadium	44.8		49.1		mg/kg	4.6	RPD<20%
Off-site Soil Area 178	OFS-178-1	OFS-978-1	5-May-10	0	0.2	N	Zinc	510		542		mg/kg	3.0	RPD<20%
Off-site Soil Area 179	OFS-179-1	OFS-979-1	6-May-10	0	0.2	N	Aluminum	17,700		16,500		mg/kg	3.5	RPD<20%
Off-site Soil Area 179	OFS-179-1	OFS-979-1	6-May-10	0	0.2	N	Antimony	0.58	J	0.42	J	mg/kg	16.0	RPD<20%
Off-site Soil Area 179	OFS-179-1	OFS-979-1	6-May-10	0	0.2	N	Arsenic	39	J	23	J	mg/kg	**25.1**	Soil - RPD<20%
Off-site Soil Area 179	OFS-179-1	OFS-979-1	6-May-10	0	0.2	N	Barium	256		209		mg/kg	10.1	RPD<20%
Off-site Soil Area 179	OFS-179-1	OFS-979-1	6-May-10	0	0.2	N	Beryllium	0.7		0.63		mg/kg	5.3	RPD<20%
Off-site Soil Area 179	OFS-179-1	OFS-979-1	6-May-10	0	0.2	N	Cadmium	1.2		1.2		mg/kg	0.0	RPD<20%
Off-site Soil Area 179	OFS-179-1	OFS-979-1	6-May-10	0	0.2	N	Calcium	6070		6000		mg/kg	0.6	RPD<20%
Off-site Soil Area 179	OFS-179-1	OFS-979-1	6-May-10	0	0.2	N	Chromium	25.3	J	28.4	J	mg/kg	5.8	RPD<20%
Off-site Soil Area 179	OFS-179-1	OFS-979-1	6-May-10	0	0.2	N	Cobalt	12.3		11.6		mg/kg	2.9	RPD<20%
Off-site Soil Area 179	OFS-179-1	OFS-979-1	6-May-10	0	0.2	N	Copper	65	J	73	J	mg/kg	6.0	RPD<20%
Off-site Soil Area 179	OFS-179-1	OFS-979-1	6-May-10	0	0.2	N	Iron	25400	J	23600	J	mg/kg	3.7	RPD<20%
Off-site Soil Area 179	OFS-179-1	OFS-979-1	6-May-10	0	0.2	N	Lead	57		74		mg/kg	12.6	RPD<20%
Off-site Soil Area 179	OFS-179-1	OFS-979-1	6-May-10	0	0.2	N	Magnesium	6760		6750		mg/kg	0.1	RPD<20%
Off-site Soil Area 179	OFS-179-1	OFS-979-1	6-May-10	0	0.2	N	Manganese	986	J	642.0	J	mg/kg	**21.1**	Soil - RPD<20%
Off-site Soil Area 179	OFS-179-1	OFS-979-1	6-May-10	0	0.2	N	Mercury	0.16		0.16		mg/kg	0.0	RPD<20%
Off-site Soil Area 179	OFS-179-1	OFS-979-1	6-May-10	0	0.2	N	Nickel	29.1	J	26.8	J	mg/kg	4.1	RPD<20%
Off-site Soil Area 179	OFS-179-1	OFS-979-1	6-May-10	0	0.2	N	Potassium	2070	J+	2050	J+	mg/kg	0.5	RPD<20%
Off-site Soil Area 179	OFS-179-1	OFS-979-1	6-May-10	0	0.2	N	Silver	0.24	J	0.35	J	mg/kg	18.6	RPD<20%
Off-site Soil Area 179	OFS-179-1	OFS-979-1	6-May-10	0	0.2	N	Sodium	143	J	137	J	mg/kg	2.1	RPD<20%
Off-site Soil Area 179	OFS-179-1	OFS-979-1	6-May-10	0	0.2	N	Vanadium	42.2		39		mg/kg	3.9	RPD<20%
Off-site Soil Area 179	OFS-179-1	OFS-979-1	6-May-10	0	0.2	N	Zinc	207		264		mg/kg	12.1	RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Aluminum	11100		11500		mg/kg	1.8	RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Antimony	2	J	1	J	mg/kg	**36.2**	Soil - RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Arsenic	241	J	111	J	mg/kg	**36.9**	Soil - RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Barium	95.4		82.7		mg/kg	7.1	RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Beryllium	0	J	0	J	mg/kg	1.4	RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Cadmium	3		2		mg/kg	**28.6**	Soil - RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Calcium	7160		6110		mg/kg	7.9	RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Chromium	25.7	J	21.2	J	mg/kg	9.6	RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Cobalt	10.1		10.2		mg/kg	0.5	RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Copper	86.5	J	83.2	J	mg/kg	1.9	RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Cyanide	0.82	J	0.44	J	mg/kg	**30.2**	Soil - RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Iron	26900	J	23700	J	mg/kg	6.3	RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Lead	275		133		mg/kg	**34.8**	Soil - RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Magnesium	5780		5520		mg/kg	2.3	RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Manganese	489	J	478	J	mg/kg	1.1	RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Mercury	1.7		0.3		mg/kg	**70.0**	Soil - RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Nickel	16.8	J	16.1	J	mg/kg	2.1	RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Potassium	2370	J+	2440	J+	mg/kg	1.5	RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Selenium	3.1	J	1.5	J	mg/kg	**34.8**	Soil - RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Silver	1		1	J	mg/kg	**27.9**	Soil - RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Sodium	534		230	J	mg/kg	**39.8**	Soil - RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Vanadium	39		40		mg/kg	1.3	RPD<20%
Off-site Soil Area 180	OFS-180-1	OFS-980-1	6-May-10	0	0.2	N	Zinc	914		482		mg/kg	**30.9**	Soil - RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Aluminum	10200		10600		mg/kg	1.9	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Antimony	1	J	1	J	mg/kg	12.6	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Arsenic	40		49		mg/kg	9.4	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Barium	158		155		mg/kg	1.0	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Beryllium	0.49	J	0.51		mg/kg	2.0	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Cadmium	0.96		1		mg/kg	2.0	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Calcium	6,340		5,940		mg/kg	3.3	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Chromium	18.4		18.7		mg/kg	0.8	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Cobalt	9.9		10.3		mg/kg	2.0	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Copper	62		62		mg/kg	0.1	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Cyanide	1	J	1	J	mg/kg	7.8	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Iron	18400		18900		mg/kg	1.3	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Lead	73.5		84.1		mg/kg	6.7	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Magnesium	4,690		4,770		mg/kg	0.8	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Manganese	578		586		mg/kg	0.7	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Mercury	0		0		mg/kg	10.1	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Nickel	17.5		17.5		mg/kg	0.0	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Potassium	3,050	J+	3,120	J+	mg/kg	1.1	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Selenium	0.78	J	0.93	J	mg/kg	8.8	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Silver	0.31	J	0.36	J	mg/kg	7.5	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Sodium	161	J	143	J	mg/kg	5.9	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Vanadium	32.3		32.3		mg/kg	0.0	RPD<20%
Off-site Soil Area 181	OFS-181-1	OFS-981-1	6-May-10	0	0.2	N	Zinc	274		303		mg/kg	5.0	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Aluminum	10700		12200		mg/kg	6.6	RPD<20%
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Antimony	0.58	J	0.8	J	mg/kg	15.9	RPD<20%
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Arsenic	25		26		mg/kg	2.6	RPD<20%
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Barium	139		147		mg/kg	2.8	RPD<20%
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Beryllium	0.4	J	0.44	J	mg/kg	4.8	RPD<20%
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Cadmium	0.93		0.72		mg/kg	12.7	RPD<20%
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Calcium	4710		4900		mg/kg	2.0	RPD<20%
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Chromium	16.5		16		mg/kg	1.5	RPD<20%
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Cobalt	11.4		12.5		mg/kg	4.6	RPD<20%
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Copper	76.6		64.5		mg/kg	8.6	RPD<20%
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Cyanide	0.18	J	0.18	J	mg/kg	0.0	RPD<20%
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Iron	23500.000		26400		mg/kg	5.8	RPD<20%
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Lead	71.7		55.7		mg/kg	12.6	RPD<20%
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Magnesium	5,290		5,610		mg/kg	2.9	RPD<20%
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Manganese	560		638		mg/kg	6.5	RPD<20%
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Mercury	0.11		0.086	J	mg/kg	12.2	RPD<20%
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Nickel	15.7		15.8		mg/kg	0.3	RPD<20%
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Potassium	3080	J+	3250	J+	mg/kg	2.7	RPD<20%
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Silver	0	J	0	J	mg/kg	6.7	RPD<20%
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Sodium	163	J	166	J	mg/kg	0.9	RPD<20%
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Vanadium	39.2		45.7		mg/kg	7.7	RPD<20%
Off-site Soil Area 182	OFS-182-1	OFS-982-1	6-May-10	0	0.2	N	Zinc	258		284		mg/kg	4.8	RPD<20%
Off-site Soil Area 183	OFS-183-1	OFS-983-1	6-May-10	0	0.2	N	Cyanide	0		1		mg/kg	16.3	RPD<20%
Off-site Soil Area 183	OFS-183-1	OFS-983-1	6-May-10	0	0.2	N	Cyanide	0	J	1		mg/kg	16.3	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Aluminum	11400		12400.0		mg/kg	4.2	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Antimony	0.33		0.42		mg/kg	12.0	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Arsenic	8		9		mg/kg	3.0	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Barium	180		190		mg/kg	2.7	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Beryllium	0.47		0.49		mg/kg	2.1	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Cadmium	0		0		mg/kg	1.4	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Calcium	29900		24700		mg/kg	9.5	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Chromium	15.9		18.2		mg/kg	6.7	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Cobalt	10.3		12.2		mg/kg	8.4	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Copper	22.1		23.7		mg/kg	3.5	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Cyanide	2.6		2.6		mg/kg	0.0	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Iron	16800		18400		mg/kg	4.5	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Lead	8		9.2		mg/kg	7.0	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Magnesium	6,410		7,090		mg/kg	5.0	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Manganese	560		635		mg/kg	6.3	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Mercury	0		0		mg/kg	0.5	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Nickel	19.1		21.5		mg/kg	5.9	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Potassium	1680		1800		mg/kg	3.4	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Selenium	3.6		3.6		mg/kg	0.0	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Silver	1		1		mg/kg	0.0	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Sodium	119		125		mg/kg	2.5	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Thallium	2.6		2.6		mg/kg	0.0	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Vanadium	33.3		36.2		mg/kg	4.2	RPD<20%
Off-site Soil Area 184	OFS-184-1	OFS-984-1	6-May-10	0	0.2	N	Zinc	47.3		51.4		mg/kg	4.2	RPD<20%
Off-site Soil Area 185	OFS-185-1	OFS-985-1	6-May-10	0	0.2	N	Aluminum	12800		13300		mg/kg	1.9	RPD<20%
Off-site Soil Area 185	OFS-185-1	OFS-985-1	6-May-10	0	0.2	N	Antimony	0.58	J	0.6	J	mg/kg	1.7	RPD<20%
Off-site Soil Area 185	OFS-185-1	OFS-985-1	6-May-10	0	0.2	N	Arsenic	11.2	J	10.7	J	mg/kg	2.3	RPD<20%
Off-site Soil Area 185	OFS-185-1	OFS-985-1	6-May-10	0	0.2	N	Barium	208		211		mg/kg	0.7	RPD<20%
Off-site Soil Area 185	OFS-185-1	OFS-985-1	6-May-10	0	0.2	N	Beryllium	1		1		mg/kg	0.0	RPD<20%
Off-site Soil Area 185	OFS-185-1	OFS-985-1	6-May-10	0	0.2	N	Cadmium	0.12	J	0.13	J	mg/kg	4.0	RPD<20%
Off-site Soil Area 185	OFS-185-1	OFS-985-1	6-May-10	0	0.2	N	Calcium	18900		17800		mg/kg	3.0	RPD<20%
Off-site Soil Area 185	OFS-185-1	OFS-985-1	6-May-10	0	0.2	N	Chromium	16.6		16.4		mg/kg	0.6	RPD<20%
Off-site Soil Area 185	OFS-185-1	OFS-985-1	6-May-10	0	0.2	N	Cobalt	11.5		11.8		mg/kg	1.3	RPD<20%
Off-site Soil Area 185	OFS-185-1	OFS-985-1	6-May-10	0	0.2	N	Copper	23.8		27.2		mg/kg	6.7	RPD<20%
Off-site Soil Area 185	OFS-185-1	OFS-985-1	6-May-10	0	0.2	N	Iron	18800		19200		mg/kg	1.1	RPD<20%
Off-site Soil Area 185	OFS-185-1	OFS-985-1	6-May-10	0	0.2	N	Lead	9.9		9.7		mg/kg	1.0	RPD<20%
Off-site Soil Area 185	OFS-185-1	OFS-985-1	6-May-10	0	0.2	N	Magnesium	6560		6790		mg/kg	1.7	RPD<20%
Off-site Soil Area 185	OFS-185-1	OFS-985-1	6-May-10	0	0.2	N	Manganese	645		597		mg/kg	3.9	RPD<20%
Off-site Soil Area 185	OFS-185-1	OFS-985-1	6-May-10	0	0.2	N	Nickel	18.9		18.4		mg/kg	1.3	RPD<20%
Off-site Soil Area 185	OFS-185-1	OFS-985-1	6-May-10	0	0.2	N	Potassium	1840	J+	1760	J+	mg/kg	2.2	RPD<20%
Off-site Soil Area 185	OFS-185-1	OFS-985-1	6-May-10	0	0.2	N	Sodium	110.0	J	115	J	mg/kg	2.2	RPD<20%
Off-site Soil Area 185	OFS-185-1	OFS-985-1	6-May-10	0	0.2	N	Vanadium	35.7		36.4		mg/kg	1.0	RPD<20%
Off-site Soil Area 185	OFS-185-1	OFS-985-1	6-May-10	0	0.2	N	Zinc	58.6		52.8		mg/kg	5.2	RPD<20%
Off-site Soil Area 186	OFS-186-1	OFS-986-1	6-May-10	0	0.2	N	Aluminum	15,300		12,700		mg/kg	9.3	RPD<20%
Off-site Soil Area 186	OFS-186-1	OFS-986-1	6-May-10	0	0.2	N	Antimony	0.42	J	0.41	J	mg/kg	1.2	RPD<20%
Off-site Soil Area 186	OFS-186-1	OFS-986-1	6-May-10	0	0.2	N	Arsenic	11.1	J	7.6	J	mg/kg	18.7	RPD<20%
Off-site Soil Area 186	OFS-186-1	OFS-986-1	6-May-10	0	0.2	N	Barium	224		182		mg/kg	10.3	RPD<20%
Off-site Soil Area 186	OFS-186-1	OFS-986-1	6-May-10	0	0.2	N	Beryllium	1		0	J	mg/kg	12.5	RPD<20%
Off-site Soil Area 186	OFS-186-1	OFS-986-1	6-May-10	0	0.2	N	Cadmium	0.29	J	0.19	J	mg/kg	**20.8**	Soil - RPD<20%
Off-site Soil Area 186	OFS-186-1	OFS-986-1	6-May-10	0	0.2	N	Calcium	6,850		5,260		mg/kg	13.1	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 186	OFS-186-1	OFS-986-1	6-May-10	0	0.2	N	Chromium	19.1		17		mg/kg	5.8	RPD<20%
Off-site Soil Area 186	OFS-186-1	OFS-986-1	6-May-10	0	0.2	N	Cobalt	10.2		9.9		mg/kg	1.5	RPD<20%
Off-site Soil Area 186	OFS-186-1	OFS-986-1	6-May-10	0	0.2	N	Copper	46.6		64.5		mg/kg	16.1	RPD<20%
Off-site Soil Area 186	OFS-186-1	OFS-986-1	6-May-10	0	0.2	N	Iron	19800		16600		mg/kg	8.8	RPD<20%
Off-site Soil Area 186	OFS-186-1	OFS-986-1	6-May-10	0	0.2	N	Lead	26		17		mg/kg	**20.6**	Soil - RPD<20%
Off-site Soil Area 186	OFS-186-1	OFS-986-1	6-May-10	0	0.2	N	Magnesium	6510		6050		mg/kg	3.7	RPD<20%
Off-site Soil Area 186	OFS-186-1	OFS-986-1	6-May-10	0	0.2	N	Manganese	557		565		mg/kg	0.7	RPD<20%
Off-site Soil Area 186	OFS-186-1	OFS-986-1	6-May-10	0	0.2	N	Mercury	0	J	0	J	mg/kg	0.0	RPD<20%
Off-site Soil Area 186	OFS-186-1	OFS-986-1	6-May-10	0	0.2	N	Nickel	23.5		20.7		mg/kg	6.3	RPD<20%
Off-site Soil Area 186	OFS-186-1	OFS-986-1	6-May-10	0	0.2	N	Potassium	2130	J+	1610	J+	mg/kg	13.9	RPD<20%
Off-site Soil Area 186	OFS-186-1	OFS-986-1	6-May-10	0	0.2	N	Sodium	107	J	112	J	mg/kg	2.3	RPD<20%
Off-site Soil Area 186	OFS-186-1	OFS-986-1	6-May-10	0	0.2	N	Vanadium	36		32		mg/kg	5.5	RPD<20%
Off-site Soil Area 186	OFS-186-1	OFS-986-1	6-May-10	0	0.2	N	Zinc	87.3		77.8		mg/kg	5.8	RPD<20%
Off-site Soil Area 187	OFS-187-1	OFS-987-1	7-May-10	0	0.2	N	Aluminum	12600		13500		mg/kg	3.4	RPD<20%
Off-site Soil Area 187	OFS-187-1	OFS-987-1	7-May-10	0	0.2	N	Arsenic	36.3	J	35.3	J	mg/kg	1.4	RPD<20%
Off-site Soil Area 187	OFS-187-1	OFS-987-1	7-May-10	0	0.2	N	Barium	190		221		mg/kg	7.5	RPD<20%
Off-site Soil Area 187	OFS-187-1	OFS-987-1	7-May-10	0	0.2	N	Cadmium	1.1		1.1		mg/kg	0.0	RPD<20%
Off-site Soil Area 187	OFS-187-1	OFS-987-1	7-May-10	0	0.2	N	Calcium	13500		13900		mg/kg	1.5	RPD<20%
Off-site Soil Area 187	OFS-187-1	OFS-987-1	7-May-10	0	0.2	N	Chromium	35.9		30.3		mg/kg	8.5	RPD<20%
Off-site Soil Area 187	OFS-187-1	OFS-987-1	7-May-10	0	0.2	N	Cobalt	15.5		15.4		mg/kg	0.3	RPD<20%
Off-site Soil Area 187	OFS-187-1	OFS-987-1	7-May-10	0	0.2	N	Copper	64.9		71		mg/kg	4.5	RPD<20%
Off-site Soil Area 187	OFS-187-1	OFS-987-1	7-May-10	0	0.2	N	Iron	24,900		26,900		mg/kg	3.9	RPD<20%
Off-site Soil Area 187	OFS-187-1	OFS-987-1	7-May-10	0	0.2	N	Lead	12.1		14.1		mg/kg	7.6	RPD<20%
Off-site Soil Area 187	OFS-187-1	OFS-987-1	7-May-10	0	0.2	N	Magnesium	8200		8350		mg/kg	0.9	RPD<20%
Off-site Soil Area 187	OFS-187-1	OFS-987-1	7-May-10	0	0.2	N	Manganese	992		1,070		mg/kg	3.8	RPD<20%
Off-site Soil Area 187	OFS-187-1	OFS-987-1	7-May-10	0	0.2	N	Nickel	33.4		31		mg/kg	3.7	RPD<20%
Off-site Soil Area 187	OFS-187-1	OFS-987-1	7-May-10	0	0.2	N	Potassium	2780	J+	2860	J+	mg/kg	1.4	RPD<20%
Off-site Soil Area 187	OFS-187-1	OFS-987-1	7-May-10	0	0.2	N	Sodium	213	J	240	J	mg/kg	6.0	RPD<20%
Off-site Soil Area 187	OFS-187-1	OFS-987-1	7-May-10	0	0.2	N	Thallium	0.12	J	0.089	J	mg/kg	14.8	RPD<20%
Off-site Soil Area 187	OFS-187-1	OFS-987-1	7-May-10	0	0.2	N	Vanadium	58.2		60.8		mg/kg	2.2	RPD<20%
Off-site Soil Area 187	OFS-187-1	OFS-987-1	7-May-10	0	0.2	N	Zinc	92.8		95.6		mg/kg	1.5	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Aluminum	12600		13400		mg/kg	3.1	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Antimony	2	J	2	J	mg/kg	8.1	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Arsenic	67.4		72.6		mg/kg	3.7	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Barium	191		203		mg/kg	3.0	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Beryllium	1		1		mg/kg	1.0	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Cadmium	3		4		mg/kg	4.3	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Calcium	5830		5610		mg/kg	1.9	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Chromium	17.9		18.6		mg/kg	1.9	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Cobalt	11.8		12.5		mg/kg	2.9	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Copper	476		585		mg/kg	10.3	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Iron	23,700		24,900		mg/kg	2.5	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Lead	423		479		mg/kg	6.2	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Magnesium	5360		5440		mg/kg	0.7	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Manganese	613		616		mg/kg	0.2	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Mercury	0.44		0.56		mg/kg	12.0	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Nickel	18		20		mg/kg	5.0	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Potassium	3940	J+	4070	J+	mg/kg	1.6	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Selenium	1.8	J	2.1	J	mg/kg	7.7	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Silver	2.9		3.3		mg/kg	6.5	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Sodium	162	J	159	J	mg/kg	0.9	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Vanadium	35.2		36.1		mg/kg	1.3	RPD<20%
Off-site Soil Area 188	OFS-188-1	OFS-988-1	6-May-10	0	0.2	N	Zinc	726		782		mg/kg	3.7	RPD<20%
Off-site Soil Area 189	OFS-189-1	OFS-989-1	6-May-10	0	0.2	N	Aluminum	10800		11300		mg/kg	2.3	RPD<20%
Off-site Soil Area 189	OFS-189-1	OFS-989-1	6-May-10	0	0.2	N	Antimony	0.73	J	0.91	J	mg/kg	11.0	RPD<20%
Off-site Soil Area 189	OFS-189-1	OFS-989-1	6-May-10	0	0.2	N	Arsenic	26.2		32.8		mg/kg	11.2	RPD<20%
Off-site Soil Area 189	OFS-189-1	OFS-989-1	6-May-10	0	0.2	N	Barium	139		138		mg/kg	0.4	RPD<20%
Off-site Soil Area 189	OFS-189-1	OFS-989-1	6-May-10	0	0.2	N	Beryllium	0.4	J	0.44	J	mg/kg	4.8	RPD<20%
Off-site Soil Area 189	OFS-189-1	OFS-989-1	6-May-10	0	0.2	N	Cadmium	1.3		1.5		mg/kg	7.1	RPD<20%
Off-site Soil Area 189	OFS-189-1	OFS-989-1	6-May-10	0	0.2	N	Calcium	4250		4510		mg/kg	3.0	RPD<20%
Off-site Soil Area 189	OFS-189-1	OFS-989-1	6-May-10	0	0.2	N	Chromium	14.8		16.3		mg/kg	4.8	RPD<20%
Off-site Soil Area 189	OFS-189-1	OFS-989-1	6-May-10	0	0.2	N	Cobalt	9		10		mg/kg	5.3	RPD<20%
Off-site Soil Area 189	OFS-189-1	OFS-989-1	6-May-10	0	0.2	N	Copper	122		154		mg/kg	11.6	RPD<20%
Off-site Soil Area 189	OFS-189-1	OFS-989-1	6-May-10	0	0.2	N	Iron	18400		19600		mg/kg	3.2	RPD<20%
Off-site Soil Area 189	OFS-189-1	OFS-989-1	6-May-10	0	0.2	N	Lead	84.4		101		mg/kg	9.0	RPD<20%
Off-site Soil Area 189	OFS-189-1	OFS-989-1	6-May-10	0	0.2	N	Magnesium	4480		4770		mg/kg	3.1	RPD<20%
Off-site Soil Area 189	OFS-189-1	OFS-989-1	6-May-10	0	0.2	N	Manganese	530		515		mg/kg	1.4	RPD<20%
Off-site Soil Area 189	OFS-189-1	OFS-989-1	6-May-10	0	0.2	N	Mercury	0.17		0.16		mg/kg	3.0	RPD<20%
Off-site Soil Area 189	OFS-189-1	OFS-989-1	6-May-10	0	0.2	N	Nickel	14.5		16		mg/kg	4.9	RPD<20%
Off-site Soil Area 189	OFS-189-1	OFS-989-1	6-May-10	0	0.2	N	Potassium	2,400	J+	2,540	J+	mg/kg	2.8	RPD<20%
Off-site Soil Area 189	OFS-189-1	OFS-989-1	6-May-10	0	0.2	N	Silver	0	J	1	J	mg/kg	7.2	RPD<20%
Off-site Soil Area 189	OFS-189-1	OFS-989-1	6-May-10	0	0.2	N	Sodium	124	J	120	J	mg/kg	1.6	RPD<20%
Off-site Soil Area 189	OFS-189-1	OFS-989-1	6-May-10	0	0.2	N	Vanadium	31.3		33.7		mg/kg	3.7	RPD<20%
Off-site Soil Area 189	OFS-189-1	OFS-989-1	6-May-10	0	0.2	N	Zinc	259		309		mg/kg	8.8	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 190	OFS-190-1	OFS-990-1	7-May-10	0	0.2	N	Aluminum	15800		16800		mg/kg	3.1	RPD<20%
Off-site Soil Area 190	OFS-190-1	OFS-990-1	7-May-10	0	0.2	N	Antimony	0.59	J	0.56	J	mg/kg	2.6	RPD<20%
Off-site Soil Area 190	OFS-190-1	OFS-990-1	7-May-10	0	0.2	N	Arsenic	26.6	J	13.3	J	mg/kg	**33.3**	Soil - RPD<20%
Off-site Soil Area 190	OFS-190-1	OFS-990-1	7-May-10	0	0.2	N	Barium	238		236		mg/kg	0.4	RPD<20%
Off-site Soil Area 190	OFS-190-1	OFS-990-1	7-May-10	0	0.2	N	Beryllium	0.58		0.61		mg/kg	2.5	RPD<20%
Off-site Soil Area 190	OFS-190-1	OFS-990-1	7-May-10	0	0.2	N	Cadmium	0.42	J	0.35	J	mg/kg	9.1	RPD<20%
Off-site Soil Area 190	OFS-190-1	OFS-990-1	7-May-10	0	0.2	N	Calcium	6050		6630		mg/kg	4.6	RPD<20%
Off-site Soil Area 190	OFS-190-1	OFS-990-1	7-May-10	0	0.2	N	Chromium	20		23		mg/kg	8.4	RPD<20%
Off-site Soil Area 190	OFS-190-1	OFS-990-1	7-May-10	0	0.2	N	Cobalt	11		11		mg/kg	0.9	RPD<20%
Off-site Soil Area 190	OFS-190-1	OFS-990-1	7-May-10	0	0.2	N	Copper	46		40		mg/kg	7.0	RPD<20%
Off-site Soil Area 190	OFS-190-1	OFS-990-1	7-May-10	0	0.2	N	Iron	21400		22700		mg/kg	2.9	RPD<20%
Off-site Soil Area 190	OFS-190-1	OFS-990-1	7-May-10	0	0.2	N	Lead	26		23.7		mg/kg	4.6	RPD<20%
Off-site Soil Area 190	OFS-190-1	OFS-990-1	7-May-10	0	0.2	N	Magnesium	6,560		7,370		mg/kg	5.8	RPD<20%
Off-site Soil Area 190	OFS-190-1	OFS-990-1	7-May-10	0	0.2	N	Manganese	618		570		mg/kg	4.0	RPD<20%
Off-site Soil Area 190	OFS-190-1	OFS-990-1	7-May-10	0	0.2	N	Mercury	0.14		0.064	J	mg/kg	**37.3**	Soil - RPD<20%
Off-site Soil Area 190	OFS-190-1	OFS-990-1	7-May-10	0	0.2	N	Nickel	20		21		mg/kg	2.4	RPD<20%
Off-site Soil Area 190	OFS-190-1	OFS-990-1	7-May-10	0	0.2	N	Potassium	2670	J+	2500	J+	mg/kg	3.3	RPD<20%
Off-site Soil Area 190	OFS-190-1	OFS-990-1	7-May-10	0	0.2	N	Silver	0.15	J	0.12	J	mg/kg	11.1	RPD<20%
Off-site Soil Area 190	OFS-190-1	OFS-990-1	7-May-10	0	0.2	N	Sodium	150	J	163	J	mg/kg	4.2	RPD<20%
Off-site Soil Area 190	OFS-190-1	OFS-990-1	7-May-10	0	0.2	N	Vanadium	37.8		40.5		mg/kg	3.4	RPD<20%
Off-site Soil Area 190	OFS-190-1	OFS-990-1	7-May-10	0	0.2	N	Zinc	140		111		mg/kg	11.6	RPD<20%
Off-site Soil Area 191	OFS-191-1	OFS-991-1	7-May-10	0	0.2	N	Aluminum	12400		13700		mg/kg	5.0	RPD<20%
Off-site Soil Area 191	OFS-191-1	OFS-991-1	7-May-10	0	0.2	N	Arsenic	33		31		mg/kg	2.8	RPD<20%
Off-site Soil Area 191	OFS-191-1	OFS-991-1	7-May-10	0	0.2	N	Barium	173		190		mg/kg	4.7	RPD<20%
Off-site Soil Area 191	OFS-191-1	OFS-991-1	7-May-10	0	0.2	N	Cadmium	1		1		mg/kg	0.0	RPD<20%
Off-site Soil Area 191	OFS-191-1	OFS-991-1	7-May-10	0	0.2	N	Calcium	3,550		3,350		mg/kg	2.9	RPD<20%
Off-site Soil Area 191	OFS-191-1	OFS-991-1	7-May-10	0	0.2	N	Chromium	22.8		25		mg/kg	4.6	RPD<20%
Off-site Soil Area 191	OFS-191-1	OFS-991-1	7-May-10	0	0.2	N	Cobalt	13.7		14.1		mg/kg	1.4	RPD<20%
Off-site Soil Area 191	OFS-191-1	OFS-991-1	7-May-10	0	0.2	N	Copper	62.8		67.2		mg/kg	3.4	RPD<20%
Off-site Soil Area 191	OFS-191-1	OFS-991-1	7-May-10	0	0.2	N	Iron	24700		26100		mg/kg	2.8	RPD<20%
Off-site Soil Area 191	OFS-191-1	OFS-991-1	7-May-10	0	0.2	N	Lead	16.4		14.3		mg/kg	6.8	RPD<20%
Off-site Soil Area 191	OFS-191-1	OFS-991-1	7-May-10	0	0.2	N	Magnesium	6,040		6,610		mg/kg	4.5	RPD<20%
Off-site Soil Area 191	OFS-191-1	OFS-991-1	7-May-10	0	0.2	N	Manganese	744		754		mg/kg	0.7	RPD<20%
Off-site Soil Area 191	OFS-191-1	OFS-991-1	7-May-10	0	0.2	N	Mercury	0.045	J	0.012	J	mg/kg	**57.9**	Soil - RPD<20%
Off-site Soil Area 191	OFS-191-1	OFS-991-1	7-May-10	0	0.2	N	Nickel	22.4		24.2		mg/kg	3.9	RPD<20%
Off-site Soil Area 191	OFS-191-1	OFS-991-1	7-May-10	0	0.2	N	Potassium	3,230	J+	3,440	J+	mg/kg	3.1	RPD<20%
Off-site Soil Area 191	OFS-191-1	OFS-991-1	7-May-10	0	0.2	N	Vanadium	47		51		mg/kg	3.4	RPD<20%
Off-site Soil Area 191	OFS-191-1	OFS-991-1	7-May-10	0	0.2	N	Zinc	82.2		72.8		mg/kg	6.1	RPD<20%
Off-site Soil Area 192	OFS-192-1	OFS-992-1	7-May-10	0	0.2	N	Aluminum	14800		13100		mg/kg	6.1	RPD<20%
Off-site Soil Area 192	OFS-192-1	OFS-992-1	7-May-10	0	0.2	N	Antimony	1	J	1	J	mg/kg	7.8	RPD<20%
Off-site Soil Area 192	OFS-192-1	OFS-992-1	7-May-10	0	0.2	N	Arsenic	27.3	J	27.4	J	mg/kg	0.2	RPD<20%
Off-site Soil Area 192	OFS-192-1	OFS-992-1	7-May-10	0	0.2	N	Barium	199		198		mg/kg	0.3	RPD<20%
Off-site Soil Area 192	OFS-192-1	OFS-992-1	7-May-10	0	0.2	N	Beryllium	0.63		0.59		mg/kg	3.3	RPD<20%
Off-site Soil Area 192	OFS-192-1	OFS-992-1	7-May-10	0	0.2	N	Cadmium	0.64	J	0.54	J	mg/kg	8.5	RPD<20%
Off-site Soil Area 192	OFS-192-1	OFS-992-1	7-May-10	0	0.2	N	Calcium	5960.0		5210		mg/kg	6.7	RPD<20%
Off-site Soil Area 192	OFS-192-1	OFS-992-1	7-May-10	0	0.2	N	Chromium	23		17		mg/kg	13.3	RPD<20%
Off-site Soil Area 192	OFS-192-1	OFS-992-1	7-May-10	0	0.2	N	Cobalt	11		10.4		mg/kg	2.8	RPD<20%
Off-site Soil Area 192	OFS-192-1	OFS-992-1	7-May-10	0	0.2	N	Copper	81.1		68.2		mg/kg	8.6	RPD<20%
Off-site Soil Area 192	OFS-192-1	OFS-992-1	7-May-10	0	0.2	N	Iron	21700		19200		mg/kg	6.1	RPD<20%
Off-site Soil Area 192	OFS-192-1	OFS-992-1	7-May-10	0	0.2	N	Lead	48.8		38.9		mg/kg	11.3	RPD<20%
Off-site Soil Area 192	OFS-192-1	OFS-992-1	7-May-10	0	0.2	N	Magnesium	5810		5190		mg/kg	5.6	RPD<20%
Off-site Soil Area 192	OFS-192-1	OFS-992-1	7-May-10	0	0.2	N	Manganese	606		628		mg/kg	1.8	RPD<20%
Off-site Soil Area 192	OFS-192-1	OFS-992-1	7-May-10	0	0.2	N	Mercury	0.12		0.12		mg/kg	0.0	RPD<20%
Off-site Soil Area 192	OFS-192-1	OFS-992-1	7-May-10	0	0.2	N	Nickel	26		25.7		mg/kg	0.6	RPD<20%
Off-site Soil Area 192	OFS-192-1	OFS-992-1	7-May-10	0	0.2	N	Potassium	3700	J+	3260	J+	mg/kg	6.3	RPD<20%
Off-site Soil Area 192	OFS-192-1	OFS-992-1	7-May-10	0	0.2	N	Silver	0.25	J	0.22	J	mg/kg	6.4	RPD<20%
Off-site Soil Area 192	OFS-192-1	OFS-992-1	7-May-10	0	0.2	N	Sodium	116	J	106	J	mg/kg	4.5	RPD<20%
Off-site Soil Area 192	OFS-192-1	OFS-992-1	7-May-10	0	0.2	N	Vanadium	37.7		35.5		mg/kg	3.0	RPD<20%
Off-site Soil Area 192	OFS-192-1	OFS-992-1	7-May-10	0	0.2	N	Zinc	181		144		mg/kg	11.4	RPD<20%
Off-site Soil Area 193	OFS-193-1	OFS-993-1	7-May-10	0	0.2	N	Aluminum	12300		11000		mg/kg	5.6	RPD<20%
Off-site Soil Area 193	OFS-193-1	OFS-993-1	7-May-10	0	0.2	N	Arsenic	21.1		16.2		mg/kg	13.1	RPD<20%
Off-site Soil Area 193	OFS-193-1	OFS-993-1	7-May-10	0	0.2	N	Barium	262		248		mg/kg	2.7	RPD<20%
Off-site Soil Area 193	OFS-193-1	OFS-993-1	7-May-10	0	0.2	N	Beryllium	0.55		0.53		mg/kg	1.9	RPD<20%
Off-site Soil Area 193	OFS-193-1	OFS-993-1	7-May-10	0	0.2	N	Cadmium	1		1		mg/kg	17.6	RPD<20%
Off-site Soil Area 193	OFS-193-1	OFS-993-1	7-May-10	0	0.2	N	Calcium	22,100		18,300		mg/kg	9.4	RPD<20%
Off-site Soil Area 193	OFS-193-1	OFS-993-1	7-May-10	0	0.2	N	Chromium	18		19		mg/kg	3.0	RPD<20%
Off-site Soil Area 193	OFS-193-1	OFS-993-1	7-May-10	0	0.2	N	Cobalt	10.4		11.9		mg/kg	6.7	RPD<20%
Off-site Soil Area 193	OFS-193-1	OFS-993-1	7-May-10	0	0.2	N	Copper	114		110		mg/kg	1.8	RPD<20%
Off-site Soil Area 193	OFS-193-1	OFS-993-1	7-May-10	0	0.2	N	Cyanide	1	J	1	J	mg/kg	18.7	RPD<20%
Off-site Soil Area 193	OFS-193-1	OFS-993-1	7-May-10	0	0.2	N	Iron	18600		17400		mg/kg	3.3	RPD<20%
Off-site Soil Area 193	OFS-193-1	OFS-993-1	7-May-10	0	0.2	N	Lead	29.1		22.3		mg/kg	13.2	RPD<20%
Off-site Soil Area 193	OFS-193-1	OFS-993-1	7-May-10	0	0.2	N	Magnesium	6880		6570		mg/kg	2.3	RPD<20%
Off-site Soil Area 193	OFS-193-1	OFS-993-1	7-May-10	0	0.2	N	Manganese	1110		1140		mg/kg	1.3	RPD<20%
Off-site Soil Area 193	OFS-193-1	OFS-993-1	7-May-10	0	0.2	N	Mercury	0	J	0	J	mg/kg	9.9	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 193	OFS-193-1	OFS-993-1	7-May-10	0	0.2	N	Nickel	27.3		28.3		mg/kg	1.8	RPD<20%
Off-site Soil Area 193	OFS-193-1	OFS-993-1	7-May-10	0	0.2	N	Potassium	3,360	J+	3,200	J+	mg/kg	2.4	RPD<20%
Off-site Soil Area 193	OFS-193-1	OFS-993-1	7-May-10	0	0.2	N	Sodium	374	J	385	J	mg/kg	1.4	RPD<20%
Off-site Soil Area 193	OFS-193-1	OFS-993-1	7-May-10	0	0.2	N	Vanadium	31.2		34.5		mg/kg	5.0	RPD<20%
Off-site Soil Area 193	OFS-193-1	OFS-993-1	7-May-10	0	0.2	N	Zinc	337		287		mg/kg	8.0	RPD<20%
Off-site Soil Area 194	OFS-194-1	OFS-994-1	7-May-10	0	0.2	N	Aluminum	15,200		14,900		mg/kg	1.0	RPD<20%
Off-site Soil Area 194	OFS-194-1	OFS-994-1	7-May-10	0	0.2	N	Arsenic	17		16		mg/kg	3.4	RPD<20%
Off-site Soil Area 194	OFS-194-1	OFS-994-1	7-May-10	0	0.2	N	Barium	289		297		mg/kg	1.4	RPD<20%
Off-site Soil Area 194	OFS-194-1	OFS-994-1	7-May-10	0	0.2	N	Beryllium	0.67		0.7		mg/kg	2.2	RPD<20%
Off-site Soil Area 194	OFS-194-1	OFS-994-1	7-May-10	0	0.2	N	Cadmium	1.2		1.1		mg/kg	4.3	RPD<20%
Off-site Soil Area 194	OFS-194-1	OFS-994-1	7-May-10	0	0.2	N	Calcium	19900		14800		mg/kg	14.7	RPD<20%
Off-site Soil Area 194	OFS-194-1	OFS-994-1	7-May-10	0	0.2	N	Chromium	24.9		22.7		mg/kg	4.6	RPD<20%
Off-site Soil Area 194	OFS-194-1	OFS-994-1	7-May-10	0	0.2	N	Cobalt	14.5		13.2		mg/kg	4.7	RPD<20%
Off-site Soil Area 194	OFS-194-1	OFS-994-1	7-May-10	0	0.2	N	Copper	63.6		67.4		mg/kg	2.9	RPD<20%
Off-site Soil Area 194	OFS-194-1	OFS-994-1	7-May-10	0	0.2	N	Iron	21800		20700		mg/kg	2.6	RPD<20%
Off-site Soil Area 194	OFS-194-1	OFS-994-1	7-May-10	0	0.2	N	Lead	24.6		29.6		mg/kg	9.2	RPD<20%
Off-site Soil Area 194	OFS-194-1	OFS-994-1	7-May-10	0	0.2	N	Magnesium	8940		8860		mg/kg	0.4	RPD<20%
Off-site Soil Area 194	OFS-194-1	OFS-994-1	7-May-10	0	0.2	N	Manganese	1,000		973		mg/kg	1.4	RPD<20%
Off-site Soil Area 194	OFS-194-1	OFS-994-1	7-May-10	0	0.2	N	Nickel	32.1		32.1		mg/kg	0.0	RPD<20%
Off-site Soil Area 194	OFS-194-1	OFS-994-1	7-May-10	0	0.2	N	Potassium	3310	J+	2760	J+	mg/kg	9.1	RPD<20%
Off-site Soil Area 194	OFS-194-1	OFS-994-1	7-May-10	0	0.2	N	Sodium	98.1	J	148	J	mg/kg	**20.3**	Soil - RPD<20%
Off-site Soil Area 194	OFS-194-1	OFS-994-1	7-May-10	0	0.2	N	Vanadium	49		47		mg/kg	2.4	RPD<20%
Off-site Soil Area 194	OFS-194-1	OFS-994-1	7-May-10	0	0.2	N	Zinc	141		134		mg/kg	2.5	RPD<20%
Off-site Soil Area 195	OFS-195-1	OFS-995-1	7-May-10	0	0.2	N	Aluminum	13200		11900		mg/kg	5.2	RPD<20%
Off-site Soil Area 195	OFS-195-1	OFS-995-1	7-May-10	0	0.2	N	Arsenic	20.2		24.3		mg/kg	9.2	RPD<20%
Off-site Soil Area 195	OFS-195-1	OFS-995-1	7-May-10	0	0.2	N	Barium	237		219		mg/kg	3.9	RPD<20%
Off-site Soil Area 195	OFS-195-1	OFS-995-1	7-May-10	0	0.2	N	Beryllium	0.72		0.66		mg/kg	4.3	RPD<20%
Off-site Soil Area 195	OFS-195-1	OFS-995-1	7-May-10	0	0.2	N	Cadmium	1		1		mg/kg	9.8	RPD<20%
Off-site Soil Area 195	OFS-195-1	OFS-995-1	7-May-10	0	0.2	N	Calcium	6,120		5,510		mg/kg	5.2	RPD<20%
Off-site Soil Area 195	OFS-195-1	OFS-995-1	7-May-10	0	0.2	N	Chromium	13.2		13.2		mg/kg	0.0	RPD<20%
Off-site Soil Area 195	OFS-195-1	OFS-995-1	7-May-10	0	0.2	N	Cobalt	8.7		8.9		mg/kg	1.1	RPD<20%
Off-site Soil Area 195	OFS-195-1	OFS-995-1	7-May-10	0	0.2	N	Copper	55		61		mg/kg	5.4	RPD<20%
Off-site Soil Area 195	OFS-195-1	OFS-995-1	7-May-10	0	0.2	N	Iron	18300		17200		mg/kg	3.1	RPD<20%
Off-site Soil Area 195	OFS-195-1	OFS-995-1	7-May-10	0	0.2	N	Lead	112		135		mg/kg	9.3	RPD<20%
Off-site Soil Area 195	OFS-195-1	OFS-995-1	7-May-10	0	0.2	N	Magnesium	5610		5090		mg/kg	4.9	RPD<20%
Off-site Soil Area 195	OFS-195-1	OFS-995-1	7-May-10	0	0.2	N	Manganese	550		537		mg/kg	1.2	RPD<20%
Off-site Soil Area 195	OFS-195-1	OFS-995-1	7-May-10	0	0.2	N	Mercury	0.17		0.26		mg/kg	**20.9**	Soil - RPD<20%
Off-site Soil Area 195	OFS-195-1	OFS-995-1	7-May-10	0	0.2	N	Nickel	14		14		mg/kg	0.7	RPD<20%
Off-site Soil Area 195	OFS-195-1	OFS-995-1	7-May-10	0	0.2	N	Potassium	2520	J+	2360	J+	mg/kg	3.3	RPD<20%
Off-site Soil Area 195	OFS-195-1	OFS-995-1	7-May-10	0	0.2	N	Silver	0.38	J	0.43	J	mg/kg	6.2	RPD<20%
Off-site Soil Area 195	OFS-195-1	OFS-995-1	7-May-10	0	0.2	N	Sodium	90.2	J	83.1	J	mg/kg	4.1	RPD<20%
Off-site Soil Area 195	OFS-195-1	OFS-995-1	7-May-10	0	0.2	N	Thallium	0.41	J	0.23	J	mg/kg	**28.1**	Soil - RPD<20%
Off-site Soil Area 195	OFS-195-1	OFS-995-1	7-May-10	0	0.2	N	Vanadium	38.3		37.8		mg/kg	0.7	RPD<20%
Off-site Soil Area 195	OFS-195-1	OFS-995-1	7-May-10	0	0.2	N	Zinc	244		281		mg/kg	7.0	RPD<20%
Off-site Soil Area 196	OFS-196-1	OFS-996-1	7-May-10	0	0.2	N	Aluminum	17700		13600		mg/kg	13.1	RPD<20%
Off-site Soil Area 196	OFS-196-1	OFS-996-1	7-May-10	0	0.2	N	Arsenic	25.6		16.8		mg/kg	**20.8**	Soil - RPD<20%
Off-site Soil Area 196	OFS-196-1	OFS-996-1	7-May-10	0	0.2	N	Barium	320		219		mg/kg	18.7	RPD<20%
Off-site Soil Area 196	OFS-196-1	OFS-996-1	7-May-10	0	0.2	N	Beryllium	0.93		0.72		mg/kg	12.7	RPD<20%
Off-site Soil Area 196	OFS-196-1	OFS-996-1	7-May-10	0	0.2	N	Calcium	10500		6930		mg/kg	**20.5**	Soil - RPD<20%
Off-site Soil Area 196	OFS-196-1	OFS-996-1	7-May-10	0	0.2	N	Chromium	20.6		17.1		mg/kg	9.3	RPD<20%
Off-site Soil Area 196	OFS-196-1	OFS-996-1	7-May-10	0	0.2	N	Cobalt	14		10.4		mg/kg	14.8	RPD<20%
Off-site Soil Area 196	OFS-196-1	OFS-996-1	7-May-10	0	0.2	N	Copper	60.3		39.3		mg/kg	**21.1**	Soil - RPD<20%
Off-site Soil Area 196	OFS-196-1	OFS-996-1	7-May-10	0	0.2	N	Iron	28,800		22,500		mg/kg	12.3	RPD<20%
Off-site Soil Area 196	OFS-196-1	OFS-996-1	7-May-10	0	0.2	N	Lead	58.9		33.6		mg/kg	**27.4**	Soil - RPD<20%
Off-site Soil Area 196	OFS-196-1	OFS-996-1	7-May-10	0	0.2	N	Magnesium	7510		5700		mg/kg	13.7	RPD<20%
Off-site Soil Area 196	OFS-196-1	OFS-996-1	7-May-10	0	0.2	N	Manganese	965		716		mg/kg	14.8	RPD<20%
Off-site Soil Area 196	OFS-196-1	OFS-996-1	7-May-10	0	0.2	N	Mercury	0.098	J	0.058	J	mg/kg	**25.6**	Soil - RPD<20%
Off-site Soil Area 196	OFS-196-1	OFS-996-1	7-May-10	0	0.2	N	Nickel	22		17.4		mg/kg	11.7	RPD<20%
Off-site Soil Area 196	OFS-196-1	OFS-996-1	7-May-10	0	0.2	N	Potassium	4,790	J+	3,200	J+	mg/kg	19.9	RPD<20%
Off-site Soil Area 196	OFS-196-1	OFS-996-1	7-May-10	0	0.2	N	Thallium	0	J	0	J	mg/kg	10.7	RPD<20%
Off-site Soil Area 196	OFS-196-1	OFS-996-1	7-May-10	0	0.2	N	Vanadium	61.3		47.8		mg/kg	12.4	RPD<20%
Off-site Soil Area 196	OFS-196-1	OFS-996-1	7-May-10	0	0.2	N	Zinc	153		98		mg/kg	**21.9**	Soil - RPD<20%
Off-site Soil Area 197	OFS-197-1	OFS-997-1	7-May-10	0	0.2	N	Aluminum	13200		11600		mg/kg	6.5	RPD<20%
Off-site Soil Area 197	OFS-197-1	OFS-997-1	7-May-10	0	0.2	N	Arsenic	9		9		mg/kg	1.7	RPD<20%
Off-site Soil Area 197	OFS-197-1	OFS-997-1	7-May-10	0	0.2	N	Barium	180		176		mg/kg	1.1	RPD<20%
Off-site Soil Area 197	OFS-197-1	OFS-997-1	7-May-10	0	0.2	N	Cadmium	1		1		mg/kg	4.3	RPD<20%
Off-site Soil Area 197	OFS-197-1	OFS-997-1	7-May-10	0	0.2	N	Calcium	15300		13700		mg/kg	5.5	RPD<20%
Off-site Soil Area 197	OFS-197-1	OFS-997-1	7-May-10	0	0.2	N	Chromium	13		12		mg/kg	5.2	RPD<20%
Off-site Soil Area 197	OFS-197-1	OFS-997-1	7-May-10	0	0.2	N	Cobalt	10.9		10.7		mg/kg	0.9	RPD<20%
Off-site Soil Area 197	OFS-197-1	OFS-997-1	7-May-10	0	0.2	N	Copper	47		49		mg/kg	2.0	RPD<20%
Off-site Soil Area 197	OFS-197-1	OFS-997-1	7-May-10	0	0.2	N	Cyanide	0.21	J	0.18	J	mg/kg	7.7	RPD<20%
Off-site Soil Area 197	OFS-197-1	OFS-997-1	7-May-10	0	0.2	N	Iron	23200		19600		mg/kg	8.4	RPD<20%
Off-site Soil Area 197	OFS-197-1	OFS-997-1	7-May-10	0	0.2	N	Lead	9		10.2		mg/kg	6.3	RPD<20%
Off-site Soil Area 197	OFS-197-1	OFS-997-1	7-May-10	0	0.2	N	Magnesium	8670		6910		mg/kg	11.3	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 197	OFS-197-1	OFS-997-1	7-May-10	0	0.2	N	Manganese	669		630		mg/kg	3.0	RPD<20%
Off-site Soil Area 197	OFS-197-1	OFS-997-1	7-May-10	0	0.2	N	Mercury	0.019	J	0.035	J	mg/kg	**29.6**	Soil - RPD<20%
Off-site Soil Area 197	OFS-197-1	OFS-997-1	7-May-10	0	0.2	N	Nickel	11.5		11.5		mg/kg	0.0	RPD<20%
Off-site Soil Area 197	OFS-197-1	OFS-997-1	7-May-10	0	0.2	N	Potassium	3160	J+	3120	J+	mg/kg	0.6	RPD<20%
Off-site Soil Area 197	OFS-197-1	OFS-997-1	7-May-10	0	0.2	N	Vanadium	45.7		41.6		mg/kg	4.7	RPD<20%
Off-site Soil Area 197	OFS-197-1	OFS-997-1	7-May-10	0	0.2	N	Zinc	89.1		98.9		mg/kg	5.2	RPD<20%
Off-site Soil Area 198	OFS-198-1	OFS-998-1	7-May-10	0	0.2	N	Aluminum	12400		13000		mg/kg	2.4	RPD<20%
Off-site Soil Area 198	OFS-198-1	OFS-998-1	7-May-10	0	0.2	N	Arsenic	18.4		20.2		mg/kg	4.7	RPD<20%
Off-site Soil Area 198	OFS-198-1	OFS-998-1	7-May-10	0	0.2	N	Barium	186		192		mg/kg	1.6	RPD<20%
Off-site Soil Area 198	OFS-198-1	OFS-998-1	7-May-10	0	0.2	N	Cadmium	1		1		mg/kg	3.7	RPD<20%
Off-site Soil Area 198	OFS-198-1	OFS-998-1	7-May-10	0	0.2	N	Calcium	15900		15300		mg/kg	1.9	RPD<20%
Off-site Soil Area 198	OFS-198-1	OFS-998-1	7-May-10	0	0.2	N	Chromium	13.2		14.7		mg/kg	5.4	RPD<20%
Off-site Soil Area 198	OFS-198-1	OFS-998-1	7-May-10	0	0.2	N	Cobalt	8.1		9.1		mg/kg	5.8	RPD<20%
Off-site Soil Area 198	OFS-198-1	OFS-998-1	7-May-10	0	0.2	N	Copper	89.9		97.5		mg/kg	4.1	RPD<20%
Off-site Soil Area 198	OFS-198-1	OFS-998-1	7-May-10	0	0.2	N	Cyanide	0.19	J	0.28	J	mg/kg	19.1	RPD<20%
Off-site Soil Area 198	OFS-198-1	OFS-998-1	7-May-10	0	0.2	N	Iron	18600		19500		mg/kg	2.4	RPD<20%
Off-site Soil Area 198	OFS-198-1	OFS-998-1	7-May-10	0	0.2	N	Lead	52.8		55.8		mg/kg	2.8	RPD<20%
Off-site Soil Area 198	OFS-198-1	OFS-998-1	7-May-10	0	0.2	N	Magnesium	7240		7870		mg/kg	4.2	RPD<20%
Off-site Soil Area 198	OFS-198-1	OFS-998-1	7-May-10	0	0.2	N	Manganese	545		637		mg/kg	7.8	RPD<20%
Off-site Soil Area 198	OFS-198-1	OFS-998-1	7-May-10	0	0.2	N	Mercury	0.12		0.2		mg/kg	**25.0**	Soil - RPD<20%
Off-site Soil Area 198	OFS-198-1	OFS-998-1	7-May-10	0	0.2	N	Nickel	12.7		14		mg/kg	4.9	RPD<20%
Off-site Soil Area 198	OFS-198-1	OFS-998-1	7-May-10	0	0.2	N	Potassium	2,750	J+	2,780	J+	mg/kg	0.5	RPD<20%
Off-site Soil Area 198	OFS-198-1	OFS-998-1	7-May-10	0	0.2	N	Selenium	1	J	1	J	mg/kg	4.0	RPD<20%
Off-site Soil Area 198	OFS-198-1	OFS-998-1	7-May-10	0	0.2	N	Sodium	791		829		mg/kg	2.3	RPD<20%
Off-site Soil Area 198	OFS-198-1	OFS-998-1	7-May-10	0	0.2	N	Vanadium	34.2		37.4		mg/kg	4.5	RPD<20%
Off-site Soil Area 198	OFS-198-1	OFS-998-1	7-May-10	0	0.2	N	Zinc	277		293		mg/kg	2.8	RPD<20%
Off-site Soil Area 199	OFS-199-1	OFS-999-1	8-May-10	0	0.2	N	Aluminum	18500		18700		mg/kg	0.5	RPD<20%
Off-site Soil Area 199	OFS-199-1	OFS-999-1	8-May-10	0	0.2	N	Arsenic	38.7	J	37.7	J	mg/kg	1.3	RPD<20%
Off-site Soil Area 199	OFS-199-1	OFS-999-1	8-May-10	0	0.2	N	Barium	830		826		mg/kg	0.2	RPD<20%
Off-site Soil Area 199	OFS-199-1	OFS-999-1	8-May-10	0	0.2	N	Beryllium	1		1		mg/kg	0.0	RPD<20%
Off-site Soil Area 199	OFS-199-1	OFS-999-1	8-May-10	0	0.2	N	Cadmium	1.2		1.2		mg/kg	0.0	RPD<20%
Off-site Soil Area 199	OFS-199-1	OFS-999-1	8-May-10	0	0.2	N	Calcium	14,200		15,000		mg/kg	2.7	RPD<20%
Off-site Soil Area 199	OFS-199-1	OFS-999-1	8-May-10	0	0.2	N	Chromium	46.5		46.1		mg/kg	0.4	RPD<20%
Off-site Soil Area 199	OFS-199-1	OFS-999-1	8-May-10	0	0.2	N	Cobalt	21.3		21.5		mg/kg	0.5	RPD<20%
Off-site Soil Area 199	OFS-199-1	OFS-999-1	8-May-10	0	0.2	N	Copper	184		172		mg/kg	3.4	RPD<20%
Off-site Soil Area 199	OFS-199-1	OFS-999-1	8-May-10	0	0.2	N	Iron	21800		22000		mg/kg	0.5	RPD<20%
Off-site Soil Area 199	OFS-199-1	OFS-999-1	8-May-10	0	0.2	N	Lead	69.1		65.4		mg/kg	2.8	RPD<20%
Off-site Soil Area 199	OFS-199-1	OFS-999-1	8-May-10	0	0.2	N	Magnesium	8,760		9,880		mg/kg	6.0	RPD<20%
Off-site Soil Area 199	OFS-199-1	OFS-999-1	8-May-10	0	0.2	N	Manganese	975		978		mg/kg	0.2	RPD<20%
Off-site Soil Area 199	OFS-199-1	OFS-999-1	8-May-10	0	0.2	N	Mercury	0.073	J	0.07	J	mg/kg	2.1	RPD<20%
Off-site Soil Area 199	OFS-199-1	OFS-999-1	8-May-10	0	0.2	N	Nickel	70		77.6		mg/kg	5.1	RPD<20%
Off-site Soil Area 199	OFS-199-1	OFS-999-1	8-May-10	0	0.2	N	Potassium	4020	J+	3980	J+	mg/kg	0.5	RPD<20%
Off-site Soil Area 199	OFS-199-1	OFS-999-1	8-May-10	0	0.2	N	Thallium	1.1	J	1.2	J	mg/kg	4.3	RPD<20%
Off-site Soil Area 199	OFS-199-1	OFS-999-1	8-May-10	0	0.2	N	Vanadium	61.5		59.5		mg/kg	1.7	RPD<20%
Off-site Soil Area 199	OFS-199-1	OFS-999-1	8-May-10	0	0.2	N	Zinc	116		115		mg/kg	0.4	RPD<20%
Off-site Soil Area 200	OFS-200-1	OFS-800-1	7-May-10	0	0.2	N	Aluminum	30700		30000		mg/kg	1.2	RPD<20%
Off-site Soil Area 200	OFS-200-1	OFS-800-1	7-May-10	0	0.2	N	Antimony	0.62	J	0.59	J	mg/kg	2.5	RPD<20%
Off-site Soil Area 200	OFS-200-1	OFS-800-1	7-May-10	0	0.2	N	Arsenic	15.8	J	16.6	J	mg/kg	2.5	RPD<20%
Off-site Soil Area 200	OFS-200-1	OFS-800-1	7-May-10	0	0.2	N	Barium	71.7		74.2		mg/kg	1.7	RPD<20%
Off-site Soil Area 200	OFS-200-1	OFS-800-1	7-May-10	0	0.2	N	Calcium	5760		5370		mg/kg	3.5	RPD<20%
Off-site Soil Area 200	OFS-200-1	OFS-800-1	7-May-10	0	0.2	N	Chromium	59		61		mg/kg	2.1	RPD<20%
Off-site Soil Area 200	OFS-200-1	OFS-800-1	7-May-10	0	0.2	N	Cobalt	27.4		27.2		mg/kg	0.4	RPD<20%
Off-site Soil Area 200	OFS-200-1	OFS-800-1	7-May-10	0	0.2	N	Copper	84		85.4		mg/kg	0.8	RPD<20%
Off-site Soil Area 200	OFS-200-1	OFS-800-1	7-May-10	0	0.2	N	Iron	54,000		51,400		mg/kg	2.5	RPD<20%
Off-site Soil Area 200	OFS-200-1	OFS-800-1	7-May-10	0	0.2	N	Lead	13		19		mg/kg	18.6	RPD<20%
Off-site Soil Area 200	OFS-200-1	OFS-800-1	7-May-10	0	0.2	N	Magnesium	21200		21600		mg/kg	0.9	RPD<20%
Off-site Soil Area 200	OFS-200-1	OFS-800-1	7-May-10	0	0.2	N	Manganese	920		948		mg/kg	1.5	RPD<20%
Off-site Soil Area 200	OFS-200-1	OFS-800-1	7-May-10	0	0.2	N	Mercury	0.062	J	0.065	J	mg/kg	2.4	RPD<20%
Off-site Soil Area 200	OFS-200-1	OFS-800-1	7-May-10	0	0.2	N	Nickel	48.9		48.4		mg/kg	0.5	RPD<20%
Off-site Soil Area 200	OFS-200-1	OFS-800-1	7-May-10	0	0.2	N	Potassium	1070	J+	1530	J+	mg/kg	17.7	RPD<20%
Off-site Soil Area 200	OFS-200-1	OFS-800-1	7-May-10	0	0.2	N	Selenium	2.2	J-	2.3	J-	mg/kg	2.2	RPD<20%
Off-site Soil Area 200	OFS-200-1	OFS-800-1	7-May-10	0	0.2	N	Thallium	1.4	J	1.2	J	mg/kg	7.7	RPD<20%
Off-site Soil Area 200	OFS-200-1	OFS-800-1	7-May-10	0	0.2	N	Vanadium	169		161		mg/kg	2.4	RPD<20%
Off-site Soil Area 200	OFS-200-1	OFS-800-1	7-May-10	0	0.2	N	Zinc	65		80.4		mg/kg	10.6	RPD<20%
Off-site Soil Area 201	OFS-201-1	OFS-801-1	7-May-10	0	0.2	N	Aluminum	27,700		28,900		mg/kg	2.1	RPD<20%
Off-site Soil Area 201	OFS-201-1	OFS-801-1	7-May-10	0	0.2	N	Arsenic	25.6		26.2		mg/kg	1.2	RPD<20%
Off-site Soil Area 201	OFS-201-1	OFS-801-1	7-May-10	0	0.2	N	Barium	230		217		mg/kg	2.9	RPD<20%
Off-site Soil Area 201	OFS-201-1	OFS-801-1	7-May-10	0	0.2	N	Cadmium	2.3		2.4		mg/kg	2.1	RPD<20%
Off-site Soil Area 201	OFS-201-1	OFS-801-1	7-May-10	0	0.2	N	Calcium	4380		4400		mg/kg	0.2	RPD<20%
Off-site Soil Area 201	OFS-201-1	OFS-801-1	7-May-10	0	0.2	N	Chromium	50.2		53.8		mg/kg	3.5	RPD<20%
Off-site Soil Area 201	OFS-201-1	OFS-801-1	7-May-10	0	0.2	N	Cobalt	32		35		mg/kg	5.4	RPD<20%
Off-site Soil Area 201	OFS-201-1	OFS-801-1	7-May-10	0	0.2	N	Copper	88.1		90.4		mg/kg	1.3	RPD<20%
Off-site Soil Area 201	OFS-201-1	OFS-801-1	7-May-10	0	0.2	N	Iron	55500		59200		mg/kg	3.2	RPD<20%
Off-site Soil Area 201	OFS-201-1	OFS-801-1	7-May-10	0	0.2	N	Lead	14		15		mg/kg	2.1	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 201	OFS-201-1	OFS-801-1	7-May-10	0	0.2	N	Magnesium	20,400		21,000		mg/kg	1.4	RPD<20%
Off-site Soil Area 201	OFS-201-1	OFS-801-1	7-May-10	0	0.2	N	Manganese	2510		2950		mg/kg	8.1	RPD<20%
Off-site Soil Area 201	OFS-201-1	OFS-801-1	7-May-10	0	0.2	N	Nickel	42.5		45.5		mg/kg	3.4	RPD<20%
Off-site Soil Area 201	OFS-201-1	OFS-801-1	7-May-10	0	0.2	N	Potassium	2750	J+	2530	J+	mg/kg	4.2	RPD<20%
Off-site Soil Area 201	OFS-201-1	OFS-801-1	7-May-10	0	0.2	N	Thallium	0.11	J	0.13	J	mg/kg	8.3	RPD<20%
Off-site Soil Area 201	OFS-201-1	OFS-801-1	7-May-10	0	0.2	N	Vanadium	157		170		mg/kg	4.0	RPD<20%
Off-site Soil Area 201	OFS-201-1	OFS-801-1	7-May-10	0	0.2	N	Zinc	117		120		mg/kg	1.3	RPD<20%
Off-site Soil Area 202	OFS-202-1	OFS-802-1	11-May-10	0	0.2	N	Aluminum	17400		19100		mg/kg	4.7	RPD<20%
Off-site Soil Area 202	OFS-202-1	OFS-802-1	11-May-10	0	0.2	N	Arsenic	15		17		mg/kg	6.3	RPD<20%
Off-site Soil Area 202	OFS-202-1	OFS-802-1	11-May-10	0	0.2	N	Barium	577	J	639		mg/kg	5.1	RPD<20%
Off-site Soil Area 202	OFS-202-1	OFS-802-1	11-May-10	0	0.2	N	Beryllium	0.9		0.97		mg/kg	3.7	RPD<20%
Off-site Soil Area 202	OFS-202-1	OFS-802-1	11-May-10	0	0.2	N	Cadmium	0.9		0.93		mg/kg	3.9	RPD<20%
Off-site Soil Area 202	OFS-202-1	OFS-802-1	11-May-10	0	0.2	N	Calcium	95700		89900		mg/kg	3.1	RPD<20%
Off-site Soil Area 202	OFS-202-1	OFS-802-1	11-May-10	0	0.2	N	Chromium	19.3		22.9		mg/kg	8.5	RPD<20%
Off-site Soil Area 202	OFS-202-1	OFS-802-1	11-May-10	0	0.2	N	Cobalt	14.5		16.2		mg/kg	5.5	RPD<20%
Off-site Soil Area 202	OFS-202-1	OFS-802-1	11-May-10	0	0.2	N	Copper	29		34		mg/kg	7.4	RPD<20%
Off-site Soil Area 202	OFS-202-1	OFS-802-1	11-May-10	0	0.2	N	Iron	15700		17700		mg/kg	6.0	RPD<20%
Off-site Soil Area 202	OFS-202-1	OFS-802-1	11-May-10	0	0.2	N	Lead	11		12		mg/kg	5.6	RPD<20%
Off-site Soil Area 202	OFS-202-1	OFS-802-1	11-May-10	0	0.2	N	Magnesium	11200		11800		mg/kg	2.6	RPD<20%
Off-site Soil Area 202	OFS-202-1	OFS-802-1	11-May-10	0	0.2	N	Manganese	686		761		mg/kg	5.2	RPD<20%
Off-site Soil Area 202	OFS-202-1	OFS-802-1	11-May-10	0	0.2	N	Nickel	61		66		mg/kg	3.5	RPD<20%
Off-site Soil Area 202	OFS-202-1	OFS-802-1	11-May-10	0	0.2	N	Potassium	2360	J+	2630	J+	mg/kg	5.4	RPD<20%
Off-site Soil Area 202	OFS-202-1	OFS-802-1	11-May-10	0	0.2	N	Vanadium	47.8		51.5		mg/kg	3.7	RPD<20%
Off-site Soil Area 202	OFS-202-1	OFS-802-1	11-May-10	0	0.2	N	Zinc	50		56.8		mg/kg	6.4	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Aluminum	21600		20700		mg/kg	2.1	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Antimony	3.8	J	3.3	J	mg/kg	7.0	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Arsenic	237		211		mg/kg	5.8	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Barium	573		336		mg/kg	**26.1**	Soil - RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Beryllium	1.6	J	1.6	J	mg/kg	0.0	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Cadmium	8.3		8		mg/kg	1.8	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Calcium	5250		4850		mg/kg	4.0	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Chromium	45.9		45.8		mg/kg	0.1	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Cobalt	14		13		mg/kg	3.3	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Copper	2270		2060		mg/kg	4.8	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Iron	23800		21800		mg/kg	4.4	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Lead	469		416		mg/kg	6.0	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Magnesium	5590		4740		mg/kg	8.2	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Manganese	431		430		mg/kg	0.1	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Mercury	1		1		mg/kg	0.0	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Nickel	46.1		41.2		mg/kg	5.6	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Potassium	2460	J+	2280	J+	mg/kg	3.8	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Selenium	3	J	3	J	mg/kg	8.8	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Silver	7		8		mg/kg	5.5	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Sodium	86	J	72	J	mg/kg	8.6	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Thallium	0.29	J	0.29	J	mg/kg	0.0	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Vanadium	42.6		40.5		mg/kg	2.5	RPD<20%
Off-site Soil Area 203	OFS-203-1	OFS-803-1	7-May-10	0	0.2	N	Zinc	898		878		mg/kg	1.1	RPD<20%
Off-site Soil Area 204	OFS-204-1	OFS-804-1	8-May-10	0	0.2	N	Aluminum	12,500		12,700		mg/kg	0.8	RPD<20%
Off-site Soil Area 204	OFS-204-1	OFS-804-1	8-May-10	0	0.2	N	Antimony	1	J	1	J	mg/kg	8.3	RPD<20%
Off-site Soil Area 204	OFS-204-1	OFS-804-1	8-May-10	0	0.2	N	Arsenic	24	J	24	J	mg/kg	0.4	RPD<20%
Off-site Soil Area 204	OFS-204-1	OFS-804-1	8-May-10	0	0.2	N	Barium	165		164		mg/kg	0.3	RPD<20%
Off-site Soil Area 204	OFS-204-1	OFS-804-1	8-May-10	0	0.2	N	Beryllium	0.4	J	0.39	J	mg/kg	1.3	RPD<20%
Off-site Soil Area 204	OFS-204-1	OFS-804-1	8-May-10	0	0.2	N	Cadmium	1.6		1.5		mg/kg	3.2	RPD<20%
Off-site Soil Area 204	OFS-204-1	OFS-804-1	8-May-10	0	0.2	N	Calcium	8510		8210		mg/kg	1.8	RPD<20%
Off-site Soil Area 204	OFS-204-1	OFS-804-1	8-May-10	0	0.2	N	Chromium	24.6		23.9		mg/kg	1.4	RPD<20%
Off-site Soil Area 204	OFS-204-1	OFS-804-1	8-May-10	0	0.2	N	Cobalt	13.7		12.9		mg/kg	3.0	RPD<20%
Off-site Soil Area 204	OFS-204-1	OFS-804-1	8-May-10	0	0.2	N	Copper	127		113		mg/kg	5.8	RPD<20%
Off-site Soil Area 204	OFS-204-1	OFS-804-1	8-May-10	0	0.2	N	Iron	22100		22700		mg/kg	1.3	RPD<20%
Off-site Soil Area 204	OFS-204-1	OFS-804-1	8-May-10	0	0.2	N	Lead	56		45.9		mg/kg	9.9	RPD<20%
Off-site Soil Area 204	OFS-204-1	OFS-804-1	8-May-10	0	0.2	N	Magnesium	7210		7320		mg/kg	0.8	RPD<20%
Off-site Soil Area 204	OFS-204-1	OFS-804-1	8-May-10	0	0.2	N	Manganese	1040		1030		mg/kg	0.5	RPD<20%
Off-site Soil Area 204	OFS-204-1	OFS-804-1	8-May-10	0	0.2	N	Mercury	0		0	J	mg/kg	18.9	RPD<20%
Off-site Soil Area 204	OFS-204-1	OFS-804-1	8-May-10	0	0.2	N	Nickel	23.5		23.3		mg/kg	0.4	RPD<20%
Off-site Soil Area 204	OFS-204-1	OFS-804-1	8-May-10	0	0.2	N	Potassium	2340	J+	2280	J+	mg/kg	1.3	RPD<20%
Off-site Soil Area 204	OFS-204-1	OFS-804-1	8-May-10	0	0.2	N	Vanadium	48		51.1		mg/kg	3.1	RPD<20%
Off-site Soil Area 204	OFS-204-1	OFS-804-1	8-May-10	0	0.2	N	Zinc	195		180		mg/kg	4.0	RPD<20%
Off-site Soil Area 205	OFS-205-1	OFS-805-1	8-May-10	0	0.2	N	Aluminum	18200		18500.0		mg/kg	0.8	RPD<20%
Off-site Soil Area 205	OFS-205-1	OFS-805-1	8-May-10	0	0.2	N	Antimony	1	J	2	J	mg/kg	12.5	RPD<20%
Off-site Soil Area 205	OFS-205-1	OFS-805-1	8-May-10	0	0.2	N	Arsenic	24	J	24	J	mg/kg	0.4	RPD<20%
Off-site Soil Area 205	OFS-205-1	OFS-805-1	8-May-10	0	0.2	N	Barium	303		300		mg/kg	0.5	RPD<20%
Off-site Soil Area 205	OFS-205-1	OFS-805-1	8-May-10	0	0.2	N	Beryllium	1		1		mg/kg	0.8	RPD<20%
Off-site Soil Area 205	OFS-205-1	OFS-805-1	8-May-10	0	0.2	N	Cadmium	2		2		mg/kg	0.0	RPD<20%
Off-site Soil Area 205	OFS-205-1	OFS-805-1	8-May-10	0	0.2	N	Calcium	20200		22600		mg/kg	5.6	RPD<20%
Off-site Soil Area 205	OFS-205-1	OFS-805-1	8-May-10	0	0.2	N	Chromium	32.6		38.4		mg/kg	8.2	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 205	OFS-205-1	OFS-805-1	8-May-10	0	0.2	N	Cobalt	16.9		16.5		mg/kg	1.2	RPD<20%
Off-site Soil Area 205	OFS-205-1	OFS-805-1	8-May-10	0	0.2	N	Copper	148		136		mg/kg	4.2	RPD<20%
Off-site Soil Area 205	OFS-205-1	OFS-805-1	8-May-10	0	0.2	N	Iron	24700		25100		mg/kg	0.8	RPD<20%
Off-site Soil Area 205	OFS-205-1	OFS-805-1	8-May-10	0	0.2	N	Lead	44.4		50.5		mg/kg	6.4	RPD<20%
Off-site Soil Area 205	OFS-205-1	OFS-805-1	8-May-10	0	0.2	N	Magnesium	11000		11400		mg/kg	1.8	RPD<20%
Off-site Soil Area 205	OFS-205-1	OFS-805-1	8-May-10	0	0.2	N	Manganese	1320		1200		mg/kg	4.8	RPD<20%
Off-site Soil Area 205	OFS-205-1	OFS-805-1	8-May-10	0	0.2	N	Mercury	0	J	0	J	mg/kg	2.9	RPD<20%
Off-site Soil Area 205	OFS-205-1	OFS-805-1	8-May-10	0	0.2	N	Nickel	37.2		39.1		mg/kg	2.5	RPD<20%
Off-site Soil Area 205	OFS-205-1	OFS-805-1	8-May-10	0	0.2	N	Potassium	3880	J+	3290	J+	mg/kg	8.2	RPD<20%
Off-site Soil Area 205	OFS-205-1	OFS-805-1	8-May-10	0	0.2	N	Vanadium	54.5		55		mg/kg	0.5	RPD<20%
Off-site Soil Area 205	OFS-205-1	OFS-805-1	8-May-10	0	0.2	N	Zinc	178		161		mg/kg	5.0	RPD<20%
Off-site Soil Area 206	OFS-206-1	OFS-806-1	8-May-10	0	0.2	N	Aluminum	11000		10300		mg/kg	3.3	RPD<20%
Off-site Soil Area 206	OFS-206-1	OFS-806-1	8-May-10	0	0.2	N	Antimony	1.3	J	1.2	J	mg/kg	4.0	RPD<20%
Off-site Soil Area 206	OFS-206-1	OFS-806-1	8-May-10	0	0.2	N	Arsenic	26.5		23.1		mg/kg	6.9	RPD<20%
Off-site Soil Area 206	OFS-206-1	OFS-806-1	8-May-10	0	0.2	N	Barium	132	J	139	J	mg/kg	2.6	RPD<20%
Off-site Soil Area 206	OFS-206-1	OFS-806-1	8-May-10	0	0.2	N	Beryllium	0	J	0	J	mg/kg	1.2	RPD<20%
Off-site Soil Area 206	OFS-206-1	OFS-806-1	8-May-10	0	0.2	N	Cadmium	1.5		1.5		mg/kg	0.0	RPD<20%
Off-site Soil Area 206	OFS-206-1	OFS-806-1	8-May-10	0	0.2	N	Calcium	7400		7140		mg/kg	1.8	RPD<20%
Off-site Soil Area 206	OFS-206-1	OFS-806-1	8-May-10	0	0.2	N	Chromium	16.5		14.9		mg/kg	5.1	RPD<20%
Off-site Soil Area 206	OFS-206-1	OFS-806-1	8-May-10	0	0.2	N	Cobalt	11		11		mg/kg	1.4	RPD<20%
Off-site Soil Area 206	OFS-206-1	OFS-806-1	8-May-10	0	0.2	N	Copper	102		106		mg/kg	1.9	RPD<20%
Off-site Soil Area 206	OFS-206-1	OFS-806-1	8-May-10	0	0.2	N	Iron	20,900		18,600		mg/kg	5.8	RPD<20%
Off-site Soil Area 206	OFS-206-1	OFS-806-1	8-May-10	0	0.2	N	Lead	39.4		38.6		mg/kg	1.0	RPD<20%
Off-site Soil Area 206	OFS-206-1	OFS-806-1	8-May-10	0	0.2	N	Magnesium	5860.0		5330		mg/kg	4.7	RPD<20%
Off-site Soil Area 206	OFS-206-1	OFS-806-1	8-May-10	0	0.2	N	Manganese	698	J	763	J	mg/kg	4.4	RPD<20%
Off-site Soil Area 206	OFS-206-1	OFS-806-1	8-May-10	0	0.2	N	Mercury	0.16		0.12		mg/kg	14.3	RPD<20%
Off-site Soil Area 206	OFS-206-1	OFS-806-1	8-May-10	0	0.2	N	Nickel	15.9		14.8		mg/kg	3.6	RPD<20%
Off-site Soil Area 206	OFS-206-1	OFS-806-1	8-May-10	0	0.2	N	Potassium	4040	J+	4270	J+	mg/kg	2.8	RPD<20%
Off-site Soil Area 206	OFS-206-1	OFS-806-1	8-May-10	0	0.2	N	Silver	0.085	J	0.051	J	mg/kg	**25.0**	Soil - RPD<20%
Off-site Soil Area 206	OFS-206-1	OFS-806-1	8-May-10	0	0.2	N	Sodium	47.5	J	57.1	J	mg/kg	9.2	RPD<20%
Off-site Soil Area 206	OFS-206-1	OFS-806-1	8-May-10	0	0.2	N	Vanadium	38.6		35		mg/kg	4.9	RPD<20%
Off-site Soil Area 206	OFS-206-1	OFS-806-1	8-May-10	0	0.2	N	Zinc	182		182		mg/kg	0.0	RPD<20%
Off-site Soil Area 207	OFS-207-1	OFS-807-1	8-May-10	0	0.2	N	Aluminum	14300		16100		mg/kg	5.9	RPD<20%
Off-site Soil Area 207	OFS-207-1	OFS-807-1	8-May-10	0	0.2	N	Antimony	1.3	J	1.9	J	mg/kg	18.8	RPD<20%
Off-site Soil Area 207	OFS-207-1	OFS-807-1	8-May-10	0	0.2	N	Arsenic	14.1		17.8		mg/kg	11.6	RPD<20%
Off-site Soil Area 207	OFS-207-1	OFS-807-1	8-May-10	0	0.2	N	Barium	154	J	183	J	mg/kg	8.6	RPD<20%
Off-site Soil Area 207	OFS-207-1	OFS-807-1	8-May-10	0	0.2	N	Beryllium	1	J	1	J	mg/kg	7.3	RPD<20%
Off-site Soil Area 207	OFS-207-1	OFS-807-1	8-May-10	0	0.2	N	Cadmium	1.7		1.9		mg/kg	5.6	RPD<20%
Off-site Soil Area 207	OFS-207-1	OFS-807-1	8-May-10	0	0.2	N	Calcium	10,600		13,400		mg/kg	11.7	RPD<20%
Off-site Soil Area 207	OFS-207-1	OFS-807-1	8-May-10	0	0.2	N	Chromium	20.5		22.4		mg/kg	4.4	RPD<20%
Off-site Soil Area 207	OFS-207-1	OFS-807-1	8-May-10	0	0.2	N	Cobalt	14.1		16.1		mg/kg	6.6	RPD<20%
Off-site Soil Area 207	OFS-207-1	OFS-807-1	8-May-10	0	0.2	N	Copper	155		173		mg/kg	5.5	RPD<20%
Off-site Soil Area 207	OFS-207-1	OFS-807-1	8-May-10	0	0.2	N	Iron	25600.0		29600		mg/kg	7.2	RPD<20%
Off-site Soil Area 207	OFS-207-1	OFS-807-1	8-May-10	0	0.2	N	Lead	32		40		mg/kg	11.4	RPD<20%
Off-site Soil Area 207	OFS-207-1	OFS-807-1	8-May-10	0	0.2	N	Magnesium	7,380		8,450		mg/kg	6.8	RPD<20%
Off-site Soil Area 207	OFS-207-1	OFS-807-1	8-May-10	0	0.2	N	Manganese	743	J	889	J	mg/kg	8.9	RPD<20%
Off-site Soil Area 207	OFS-207-1	OFS-807-1	8-May-10	0	0.2	N	Nickel	19		22		mg/kg	9.0	RPD<20%
Off-site Soil Area 207	OFS-207-1	OFS-807-1	8-May-10	0	0.2	N	Potassium	2,420	J+	2,800	J+	mg/kg	7.3	RPD<20%
Off-site Soil Area 207	OFS-207-1	OFS-807-1	8-May-10	0	0.2	N	Sodium	168	J	182	J	mg/kg	4.0	RPD<20%
Off-site Soil Area 207	OFS-207-1	OFS-807-1	8-May-10	0	0.2	N	Vanadium	49		58		mg/kg	7.8	RPD<20%
Off-site Soil Area 207	OFS-207-1	OFS-807-1	8-May-10	0	0.2	N	Zinc	149		171		mg/kg	6.9	RPD<20%
Off-site Soil Area 208	OFS-208-1	OFS-808-1	8-May-10	0	0.2	N	Aluminum	19,600		15,200		mg/kg	12.6	RPD<20%
Off-site Soil Area 208	OFS-208-1	OFS-808-1	8-May-10	0	0.2	N	Antimony	2	J	2	J	mg/kg	9.1	RPD<20%
Off-site Soil Area 208	OFS-208-1	OFS-808-1	8-May-10	0	0.2	N	Arsenic	45.3		27.5		mg/kg	**24.5**	Soil - RPD<20%
Off-site Soil Area 208	OFS-208-1	OFS-808-1	8-May-10	0	0.2	N	Barium	293		220		mg/kg	14.2	RPD<20%
Off-site Soil Area 208	OFS-208-1	OFS-808-1	8-May-10	0	0.2	N	Cadmium	1.4		1.1		mg/kg	12.0	RPD<20%
Off-site Soil Area 208	OFS-208-1	OFS-808-1	8-May-10	0	0.2	N	Calcium	9330		6870		mg/kg	15.2	RPD<20%
Off-site Soil Area 208	OFS-208-1	OFS-808-1	8-May-10	0	0.2	N	Chromium	20		16		mg/kg	13.4	RPD<20%
Off-site Soil Area 208	OFS-208-1	OFS-808-1	8-May-10	0	0.2	N	Cobalt	15.5		12.9		mg/kg	9.2	RPD<20%
Off-site Soil Area 208	OFS-208-1	OFS-808-1	8-May-10	0	0.2	N	Copper	80.1		62.7		mg/kg	12.2	RPD<20%
Off-site Soil Area 208	OFS-208-1	OFS-808-1	8-May-10	0	0.2	N	Iron	34,100		27,100		mg/kg	11.4	RPD<20%
Off-site Soil Area 208	OFS-208-1	OFS-808-1	8-May-10	0	0.2	N	Lead	46.7		30.6		mg/kg	**20.8**	Soil - RPD<20%
Off-site Soil Area 208	OFS-208-1	OFS-808-1	8-May-10	0	0.2	N	Magnesium	9850		7430		mg/kg	14.0	RPD<20%
Off-site Soil Area 208	OFS-208-1	OFS-808-1	8-May-10	0	0.2	N	Manganese	916		618		mg/kg	19.4	RPD<20%
Off-site Soil Area 208	OFS-208-1	OFS-808-1	8-May-10	0	0.2	N	Mercury	0.17	J+	0.1	J+	mg/kg	**25.9**	Soil - RPD<20%
Off-site Soil Area 208	OFS-208-1	OFS-808-1	8-May-10	0	0.2	N	Nickel	19.6		15.3		mg/kg	12.3	RPD<20%
Off-site Soil Area 208	OFS-208-1	OFS-808-1	8-May-10	0	0.2	N	Potassium	6,110	J+	4,520	J+	mg/kg	15.0	RPD<20%
Off-site Soil Area 208	OFS-208-1	OFS-808-1	8-May-10	0	0.2	N	Sodium	360	J	92.4	J	mg/kg	**59.2**	Soil - RPD<20%
Off-site Soil Area 208	OFS-208-1	OFS-808-1	8-May-10	0	0.2	N	Thallium	0.37	J	0.29	J	mg/kg	12.1	RPD<20%
Off-site Soil Area 208	OFS-208-1	OFS-808-1	8-May-10	0	0.2	N	Vanadium	67		53		mg/kg	11.8	RPD<20%
Off-site Soil Area 208	OFS-208-1	OFS-808-1	8-May-10	0	0.2	N	Zinc	197		135		mg/kg	18.7	RPD<20%
Off-site Soil Area 209	OFS-209-1	OFS-809-1	8-May-10	0	0.2	N	Aluminum	11500		12400		mg/kg	3.8	RPD<20%
Off-site Soil Area 209	OFS-209-1	OFS-809-1	8-May-10	0	0.2	N	Arsenic	9.7		10.3		mg/kg	3.0	RPD<20%
Off-site Soil Area 209	OFS-209-1	OFS-809-1	8-May-10	0	0.2	N	Barium	107		122		mg/kg	6.6	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 209	OFS-209-1	OFS-809-1	8-May-10	0	0.2	N	Cadmium	1		1		mg/kg	10.8	RPD<20%
Off-site Soil Area 209	OFS-209-1	OFS-809-1	8-May-10	0	0.2	N	Calcium	6710		6990		mg/kg	2.0	RPD<20%
Off-site Soil Area 209	OFS-209-1	OFS-809-1	8-May-10	0	0.2	N	Chromium	10.8		13.2		mg/kg	10.0	RPD<20%
Off-site Soil Area 209	OFS-209-1	OFS-809-1	8-May-10	0	0.2	N	Cobalt	11.1		12.5		mg/kg	5.9	RPD<20%
Off-site Soil Area 209	OFS-209-1	OFS-809-1	8-May-10	0	0.2	N	Copper	34.9		38.3		mg/kg	4.6	RPD<20%
Off-site Soil Area 209	OFS-209-1	OFS-809-1	8-May-10	0	0.2	N	Iron	23200		29500		mg/kg	12.0	RPD<20%
Off-site Soil Area 209	OFS-209-1	OFS-809-1	8-May-10	0	0.2	N	Lead	9.2		9.8		mg/kg	3.2	RPD<20%
Off-site Soil Area 209	OFS-209-1	OFS-809-1	8-May-10	0	0.2	N	Magnesium	6,590		6,760		mg/kg	1.3	RPD<20%
Off-site Soil Area 209	OFS-209-1	OFS-809-1	8-May-10	0	0.2	N	Manganese	513		600		mg/kg	7.8	RPD<20%
Off-site Soil Area 209	OFS-209-1	OFS-809-1	8-May-10	0	0.2	N	Mercury	0	J+	0	J+	mg/kg	17.9	RPD<20%
Off-site Soil Area 209	OFS-209-1	OFS-809-1	8-May-10	0	0.2	N	Nickel	8.4		9.1		mg/kg	4.0	RPD<20%
Off-site Soil Area 209	OFS-209-1	OFS-809-1	8-May-10	0	0.2	N	Potassium	1940	J+	1890	J+	mg/kg	1.3	RPD<20%
Off-site Soil Area 209	OFS-209-1	OFS-809-1	8-May-10	0	0.2	N	Sodium	94.5	J	111	J	mg/kg	8.0	RPD<20%
Off-site Soil Area 209	OFS-209-1	OFS-809-1	8-May-10	0	0.2	N	Thallium	0.12	J	0.37	J	mg/kg	**51.0**	Soil - RPD<20%
Off-site Soil Area 209	OFS-209-1	OFS-809-1	8-May-10	0	0.2	N	Vanadium	43		46		mg/kg	3.9	RPD<20%
Off-site Soil Area 209	OFS-209-1	OFS-809-1	8-May-10	0	0.2	N	Zinc	91		389		mg/kg	**62.1**	Soil - RPD<20%
Off-site Soil Area 210	OFS-210-1	OFS-810-1	8-May-10	0	0.2	N	Aluminum	11,400		11,700		mg/kg	1.3	RPD<20%
Off-site Soil Area 210	OFS-210-1	OFS-810-1	8-May-10	0	0.2	N	Arsenic	42.9		35.5		mg/kg	9.4	RPD<20%
Off-site Soil Area 210	OFS-210-1	OFS-810-1	8-May-10	0	0.2	N	Barium	166		173		mg/kg	2.1	RPD<20%
Off-site Soil Area 210	OFS-210-1	OFS-810-1	8-May-10	0	0.2	N	Beryllium	0.51	J	0.52	J	mg/kg	1.0	RPD<20%
Off-site Soil Area 210	OFS-210-1	OFS-810-1	8-May-10	0	0.2	N	Cadmium	1.1		0.94		mg/kg	7.8	RPD<20%
Off-site Soil Area 210	OFS-210-1	OFS-810-1	8-May-10	0	0.2	N	Calcium	15400		15500		mg/kg	0.3	RPD<20%
Off-site Soil Area 210	OFS-210-1	OFS-810-1	8-May-10	0	0.2	N	Chromium	18.7		15.8		mg/kg	8.4	RPD<20%
Off-site Soil Area 210	OFS-210-1	OFS-810-1	8-May-10	0	0.2	N	Cobalt	8.8		10.3		mg/kg	7.9	RPD<20%
Off-site Soil Area 210	OFS-210-1	OFS-810-1	8-May-10	0	0.2	N	Copper	37.8		30.6		mg/kg	10.5	RPD<20%
Off-site Soil Area 210	OFS-210-1	OFS-810-1	8-May-10	0	0.2	N	Iron	18400		18100		mg/kg	0.8	RPD<20%
Off-site Soil Area 210	OFS-210-1	OFS-810-1	8-May-10	0	0.2	N	Lead	41		31		mg/kg	14.4	RPD<20%
Off-site Soil Area 210	OFS-210-1	OFS-810-1	8-May-10	0	0.2	N	Magnesium	6570		6590		mg/kg	0.2	RPD<20%
Off-site Soil Area 210	OFS-210-1	OFS-810-1	8-May-10	0	0.2	N	Manganese	580		613		mg/kg	2.8	RPD<20%
Off-site Soil Area 210	OFS-210-1	OFS-810-1	8-May-10	0	0.2	N	Mercury	0.15		0.13		mg/kg	7.1	RPD<20%
Off-site Soil Area 210	OFS-210-1	OFS-810-1	8-May-10	0	0.2	N	Nickel	14.5		15.2		mg/kg	2.4	RPD<20%
Off-site Soil Area 210	OFS-210-1	OFS-810-1	8-May-10	0	0.2	N	Potassium	2710.0	J+	2540	J+	mg/kg	3.2	RPD<20%
Off-site Soil Area 210	OFS-210-1	OFS-810-1	8-May-10	0	0.2	N	Sodium	67.4	J	60	J	mg/kg	5.8	RPD<20%
Off-site Soil Area 210	OFS-210-1	OFS-810-1	8-May-10	0	0.2	N	Vanadium	34		34.2		mg/kg	0.3	RPD<20%
Off-site Soil Area 210	OFS-210-1	OFS-810-1	8-May-10	0	0.2	N	Zinc	163		121		mg/kg	14.8	RPD<20%
Off-site Soil Area 211	OFS-211-1	OFS-811-1	8-May-10	0	0.2	N	Aluminum	11,200		11,700		mg/kg	2.2	RPD<20%
Off-site Soil Area 211	OFS-211-1	OFS-811-1	8-May-10	0	0.2	N	Arsenic	11		11		mg/kg	1.4	RPD<20%
Off-site Soil Area 211	OFS-211-1	OFS-811-1	8-May-10	0	0.2	N	Barium	128		129		mg/kg	0.4	RPD<20%
Off-site Soil Area 211	OFS-211-1	OFS-811-1	8-May-10	0	0.2	N	Cadmium	0.78		0.88		mg/kg	6.0	RPD<20%
Off-site Soil Area 211	OFS-211-1	OFS-811-1	8-May-10	0	0.2	N	Calcium	19,700		21,500		mg/kg	4.4	RPD<20%
Off-site Soil Area 211	OFS-211-1	OFS-811-1	8-May-10	0	0.2	N	Chromium	17		17		mg/kg	0.6	RPD<20%
Off-site Soil Area 211	OFS-211-1	OFS-811-1	8-May-10	0	0.2	N	Cobalt	10.2		10.8		mg/kg	2.9	RPD<20%
Off-site Soil Area 211	OFS-211-1	OFS-811-1	8-May-10	0	0.2	N	Copper	28.6		27.7		mg/kg	1.6	RPD<20%
Off-site Soil Area 211	OFS-211-1	OFS-811-1	8-May-10	0	0.2	N	Iron	19300		19100		mg/kg	0.5	RPD<20%
Off-site Soil Area 211	OFS-211-1	OFS-811-1	8-May-10	0	0.2	N	Lead	11.4		12.4		mg/kg	4.2	RPD<20%
Off-site Soil Area 211	OFS-211-1	OFS-811-1	8-May-10	0	0.2	N	Magnesium	5040		5110		mg/kg	0.7	RPD<20%
Off-site Soil Area 211	OFS-211-1	OFS-811-1	8-May-10	0	0.2	N	Manganese	413		407		mg/kg	0.7	RPD<20%
Off-site Soil Area 211	OFS-211-1	OFS-811-1	8-May-10	0	0.2	N	Mercury	0	J	0	J	mg/kg	0.0	RPD<20%
Off-site Soil Area 211	OFS-211-1	OFS-811-1	8-May-10	0	0.2	N	Nickel	15.6		15.1		mg/kg	1.6	RPD<20%
Off-site Soil Area 211	OFS-211-1	OFS-811-1	8-May-10	0	0.2	N	Potassium	2910	J+	2890	J+	mg/kg	0.3	RPD<20%
Off-site Soil Area 211	OFS-211-1	OFS-811-1	8-May-10	0	0.2	N	Sodium	90.6	J	92.4	J	mg/kg	1.0	RPD<20%
Off-site Soil Area 211	OFS-211-1	OFS-811-1	8-May-10	0	0.2	N	Vanadium	49.2		47.1		mg/kg	2.2	RPD<20%
Off-site Soil Area 211	OFS-211-1	OFS-811-1	8-May-10	0	0.2	N	Zinc	53.9		54.8		mg/kg	0.8	RPD<20%
Off-site Soil Area 212	OFS-212-1	OFS-812-1	8-May-10	0	0.2	N	Aluminum	12400		14300		mg/kg	7.1	RPD<20%
Off-site Soil Area 212	OFS-212-1	OFS-812-1	8-May-10	0	0.2	N	Arsenic	11.3	J	12	J	mg/kg	3.0	RPD<20%
Off-site Soil Area 212	OFS-212-1	OFS-812-1	8-May-10	0	0.2	N	Barium	181		202		mg/kg	5.5	RPD<20%
Off-site Soil Area 212	OFS-212-1	OFS-812-1	8-May-10	0	0.2	N	Beryllium	1		1		mg/kg	6.6	RPD<20%
Off-site Soil Area 212	OFS-212-1	OFS-812-1	8-May-10	0	0.2	N	Calcium	6600		7720		mg/kg	7.8	RPD<20%
Off-site Soil Area 212	OFS-212-1	OFS-812-1	8-May-10	0	0.2	N	Chromium	13.4		15.7		mg/kg	7.9	RPD<20%
Off-site Soil Area 212	OFS-212-1	OFS-812-1	8-May-10	0	0.2	N	Cobalt	9		9.1		mg/kg	0.6	RPD<20%
Off-site Soil Area 212	OFS-212-1	OFS-812-1	8-May-10	0	0.2	N	Copper	24.2	J	24.8	J	mg/kg	1.2	RPD<20%
Off-site Soil Area 212	OFS-212-1	OFS-812-1	8-May-10	0	0.2	N	Iron	18300		20500		mg/kg	5.7	RPD<20%
Off-site Soil Area 212	OFS-212-1	OFS-812-1	8-May-10	0	0.2	N	Lead	9.1	J	8.8	J	mg/kg	1.7	RPD<20%
Off-site Soil Area 212	OFS-212-1	OFS-812-1	8-May-10	0	0.2	N	Magnesium	5,860		6,650		mg/kg	6.3	RPD<20%
Off-site Soil Area 212	OFS-212-1	OFS-812-1	8-May-10	0	0.2	N	Manganese	552		583		mg/kg	2.7	RPD<20%
Off-site Soil Area 212	OFS-212-1	OFS-812-1	8-May-10	0	0.2	N	Nickel	14.4		15.5		mg/kg	3.7	RPD<20%
Off-site Soil Area 212	OFS-212-1	OFS-812-1	8-May-10	0	0.2	N	Potassium	1760	J+	1730	J+	mg/kg	0.9	RPD<20%
Off-site Soil Area 212	OFS-212-1	OFS-812-1	8-May-10	0	0.2	N	Sodium	76.9	J	92.2	J	mg/kg	9.0	RPD<20%
Off-site Soil Area 212	OFS-212-1	OFS-812-1	8-May-10	0	0.2	N	Thallium	0.36	J	0.28	J	mg/kg	12.5	RPD<20%
Off-site Soil Area 212	OFS-212-1	OFS-812-1	8-May-10	0	0.2	N	Vanadium	34		37		mg/kg	3.5	RPD<20%
Off-site Soil Area 212	OFS-212-1	OFS-812-1	8-May-10	0	0.2	N	Zinc	48.4		48.7		mg/kg	0.3	RPD<20%
Off-site Soil Area 213	OFS-213-1	OFS-813-1	8-May-10	0	0.2	N	Aluminum	11700		10500		mg/kg	5.4	RPD<20%
Off-site Soil Area 213	OFS-213-1	OFS-813-1	8-May-10	0	0.2	N	Antimony	1	J	1	J	mg/kg	11.1	RPD<20%
Off-site Soil Area 213	OFS-213-1	OFS-813-1	8-May-10	0	0.2	N	Arsenic	66.4		43.5		mg/kg	**20.8**	Soil - RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 213	OFS-213-1	OFS-813-1	8-May-10	0	0.2	N	Barium	224		209.0		mg/kg	3.5	RPD<20%
Off-site Soil Area 213	OFS-213-1	OFS-813-1	8-May-10	0	0.2	N	Cadmium	0.82		0.74		mg/kg	5.1	RPD<20%
Off-site Soil Area 213	OFS-213-1	OFS-813-1	8-May-10	0	0.2	N	Calcium	14100		13500		mg/kg	2.2	RPD<20%
Off-site Soil Area 213	OFS-213-1	OFS-813-1	8-May-10	0	0.2	N	Chromium	16.7		15.8		mg/kg	2.8	RPD<20%
Off-site Soil Area 213	OFS-213-1	OFS-813-1	8-May-10	0	0.2	N	Cobalt	10.6		9.4		mg/kg	6.0	RPD<20%
Off-site Soil Area 213	OFS-213-1	OFS-813-1	8-May-10	0	0.2	N	Copper	101		93.7		mg/kg	3.7	RPD<20%
Off-site Soil Area 213	OFS-213-1	OFS-813-1	8-May-10	0	0.2	N	Cyanide	0	J	0	J	mg/kg	18.5	RPD<20%
Off-site Soil Area 213	OFS-213-1	OFS-813-1	8-May-10	0	0.2	N	Iron	21300		18500		mg/kg	7.0	RPD<20%
Off-site Soil Area 213	OFS-213-1	OFS-813-1	8-May-10	0	0.2	N	Lead	143		105		mg/kg	15.3	RPD<20%
Off-site Soil Area 213	OFS-213-1	OFS-813-1	8-May-10	0	0.2	N	Magnesium	6840		6490		mg/kg	2.6	RPD<20%
Off-site Soil Area 213	OFS-213-1	OFS-813-1	8-May-10	0	0.2	N	Manganese	989		792		mg/kg	11.1	RPD<20%
Off-site Soil Area 213	OFS-213-1	OFS-813-1	8-May-10	0	0.2	N	Mercury	0.22		0.17		mg/kg	12.8	RPD<20%
Off-site Soil Area 213	OFS-213-1	OFS-813-1	8-May-10	0	0.2	N	Nickel	21.2		20.5		mg/kg	1.7	RPD<20%
Off-site Soil Area 213	OFS-213-1	OFS-813-1	8-May-10	0	0.2	N	Potassium	3,130	J+	2,850	J+	mg/kg	4.7	RPD<20%
Off-site Soil Area 213	OFS-213-1	OFS-813-1	8-May-10	0	0.2	N	Selenium	1	J	1	J	mg/kg	4.8	RPD<20%
Off-site Soil Area 213	OFS-213-1	OFS-813-1	8-May-10	0	0.2	N	Sodium	320	J	323	J	mg/kg	0.5	RPD<20%
Off-site Soil Area 213	OFS-213-1	OFS-813-1	8-May-10	0	0.2	N	Vanadium	43.7		37.4		mg/kg	7.8	RPD<20%
Off-site Soil Area 213	OFS-213-1	OFS-813-1	8-May-10	0	0.2	N	Zinc	255		243		mg/kg	2.4	RPD<20%
Off-site Soil Area 214	OFS-214-1	OFS-814-1	10-May-10	0	0.2	N	Aluminum	13600		12400		mg/kg	4.6	RPD<20%
Off-site Soil Area 214	OFS-214-1	OFS-814-1	10-May-10	0	0.2	N	Antimony	0.76	J	0.66	J	mg/kg	7.0	RPD<20%
Off-site Soil Area 214	OFS-214-1	OFS-814-1	10-May-10	0	0.2	N	Arsenic	45.6		51.6		mg/kg	6.2	RPD<20%
Off-site Soil Area 214	OFS-214-1	OFS-814-1	10-May-10	0	0.2	N	Barium	170		167		mg/kg	0.9	RPD<20%
Off-site Soil Area 214	OFS-214-1	OFS-814-1	10-May-10	0	0.2	N	Cadmium	1.3		1.4		mg/kg	3.7	RPD<20%
Off-site Soil Area 214	OFS-214-1	OFS-814-1	10-May-10	0	0.2	N	Calcium	29300		41000		mg/kg	16.6	RPD<20%
Off-site Soil Area 214	OFS-214-1	OFS-814-1	10-May-10	0	0.2	N	Chromium	18.2		16.5		mg/kg	4.9	RPD<20%
Off-site Soil Area 214	OFS-214-1	OFS-814-1	10-May-10	0	0.2	N	Cobalt	13		11		mg/kg	6.3	RPD<20%
Off-site Soil Area 214	OFS-214-1	OFS-814-1	10-May-10	0	0.2	N	Copper	56.6		59.7		mg/kg	2.7	RPD<20%
Off-site Soil Area 214	OFS-214-1	OFS-814-1	10-May-10	0	0.2	N	Iron	22100		19600		mg/kg	6.0	RPD<20%
Off-site Soil Area 214	OFS-214-1	OFS-814-1	10-May-10	0	0.2	N	Lead	180		168		mg/kg	3.4	RPD<20%
Off-site Soil Area 214	OFS-214-1	OFS-814-1	10-May-10	0	0.2	N	Magnesium	8020		7210		mg/kg	5.3	RPD<20%
Off-site Soil Area 214	OFS-214-1	OFS-814-1	10-May-10	0	0.2	N	Manganese	669		685		mg/kg	1.2	RPD<20%
Off-site Soil Area 214	OFS-214-1	OFS-814-1	10-May-10	0	0.2	N	Mercury	1		0		mg/kg	13.0	RPD<20%
Off-site Soil Area 214	OFS-214-1	OFS-814-1	10-May-10	0	0.2	N	Nickel	26.3		22.8		mg/kg	7.1	RPD<20%
Off-site Soil Area 214	OFS-214-1	OFS-814-1	10-May-10	0	0.2	N	Potassium	2670	J+	2960	J+	mg/kg	5.2	RPD<20%
Off-site Soil Area 214	OFS-214-1	OFS-814-1	10-May-10	0	0.2	N	Selenium	0.66	J	0.99	J	mg/kg	20.0	RPD<20%
Off-site Soil Area 214	OFS-214-1	OFS-814-1	10-May-10	0	0.2	N	Silver	1	J	1	J	mg/kg	4.9	RPD<20%
Off-site Soil Area 214	OFS-214-1	OFS-814-1	10-May-10	0	0.2	N	Sodium	41.4	J	38.3	J	mg/kg	3.9	RPD<20%
Off-site Soil Area 214	OFS-214-1	OFS-814-1	10-May-10	0	0.2	N	Vanadium	45		37		mg/kg	9.2	RPD<20%
Off-site Soil Area 214	OFS-214-1	OFS-814-1	10-May-10	0	0.2	N	Zinc	402		398		mg/kg	0.5	RPD<20%
Off-site Soil Area 215	OFS-215-1	OFS-815-1	10-May-10	0	0.2	N	Aluminum	7770		7800		mg/kg	0.2	RPD<20%
Off-site Soil Area 215	OFS-215-1	OFS-815-1	10-May-10	0	0.2	N	Antimony	1.3	J	1.2	J	mg/kg	4.0	RPD<20%
Off-site Soil Area 215	OFS-215-1	OFS-815-1	10-May-10	0	0.2	N	Arsenic	49	J	37	J	mg/kg	14.1	RPD<20%
Off-site Soil Area 215	OFS-215-1	OFS-815-1	10-May-10	0	0.2	N	Barium	54.3		66		mg/kg	9.7	RPD<20%
Off-site Soil Area 215	OFS-215-1	OFS-815-1	10-May-10	0	0.2	N	Cadmium	1.4		1.3		mg/kg	3.7	RPD<20%
Off-site Soil Area 215	OFS-215-1	OFS-815-1	10-May-10	0	0.2	N	Calcium	6,820		7,470		mg/kg	4.5	RPD<20%
Off-site Soil Area 215	OFS-215-1	OFS-815-1	10-May-10	0	0.2	N	Chromium	7.5		7.9		mg/kg	2.6	RPD<20%
Off-site Soil Area 215	OFS-215-1	OFS-815-1	10-May-10	0	0.2	N	Cobalt	6.7		8		mg/kg	8.8	RPD<20%
Off-site Soil Area 215	OFS-215-1	OFS-815-1	10-May-10	0	0.2	N	Copper	21.7		25.2		mg/kg	7.5	RPD<20%
Off-site Soil Area 215	OFS-215-1	OFS-815-1	10-May-10	0	0.2	N	Iron	19600		20000		mg/kg	1.0	RPD<20%
Off-site Soil Area 215	OFS-215-1	OFS-815-1	10-May-10	0	0.2	N	Lead	18.3		24.3		mg/kg	14.1	RPD<20%
Off-site Soil Area 215	OFS-215-1	OFS-815-1	10-May-10	0	0.2	N	Magnesium	4510		4510		mg/kg	0.0	RPD<20%
Off-site Soil Area 215	OFS-215-1	OFS-815-1	10-May-10	0	0.2	N	Manganese	351		393		mg/kg	5.6	RPD<20%
Off-site Soil Area 215	OFS-215-1	OFS-815-1	10-May-10	0	0.2	N	Nickel	7		7.3		mg/kg	2.1	RPD<20%
Off-site Soil Area 215	OFS-215-1	OFS-815-1	10-May-10	0	0.2	N	Potassium	1200	J+	1630	J+	mg/kg	15.2	RPD<20%
Off-site Soil Area 215	OFS-215-1	OFS-815-1	10-May-10	0	0.2	N	Sodium	69.7	J	96.5	J	mg/kg	16.1	RPD<20%
Off-site Soil Area 215	OFS-215-1	OFS-815-1	10-May-10	0	0.2	N	Vanadium	32.7		33.8		mg/kg	1.7	RPD<20%
Off-site Soil Area 215	OFS-215-1	OFS-815-1	10-May-10	0	0.2	N	Zinc	215		186		mg/kg	7.2	RPD<20%
Off-site Soil Area 216	OFS-216-1	OFS-816-1	11-May-10	0	0.2	N	Aluminum	11200.000	J	10800	J	mg/kg	1.8	RPD<20%
Off-site Soil Area 216	OFS-216-1	OFS-816-1	11-May-10	0	0.2	N	Antimony	1.3	J	1.5	J	mg/kg	7.1	RPD<20%
Off-site Soil Area 216	OFS-216-1	OFS-816-1	11-May-10	0	0.2	N	Arsenic	14	J	12	J	mg/kg	5.0	RPD<20%
Off-site Soil Area 216	OFS-216-1	OFS-816-1	11-May-10	0	0.2	N	Barium	165	J	162	J	mg/kg	0.9	RPD<20%
Off-site Soil Area 216	OFS-216-1	OFS-816-1	11-May-10	0	0.2	N	Cadmium	1.1		0.91		mg/kg	9.5	RPD<20%
Off-site Soil Area 216	OFS-216-1	OFS-816-1	11-May-10	0	0.2	N	Calcium	21300	J	32300	J	mg/kg	**20.5**	Soil - RPD<20%
Off-site Soil Area 216	OFS-216-1	OFS-816-1	11-May-10	0	0.2	N	Chromium	18	J	17.5	J	mg/kg	1.4	RPD<20%
Off-site Soil Area 216	OFS-216-1	OFS-816-1	11-May-10	0	0.2	N	Cobalt	10		10		mg/kg	3.0	RPD<20%
Off-site Soil Area 216	OFS-216-1	OFS-816-1	11-May-10	0	0.2	N	Copper	69	J	56.8	J	mg/kg	9.7	RPD<20%
Off-site Soil Area 216	OFS-216-1	OFS-816-1	11-May-10	0	0.2	N	Cyanide	1.1	J	0.18	J	mg/kg	**71.9**	Soil - RPD<20%
Off-site Soil Area 216	OFS-216-1	OFS-816-1	11-May-10	0	0.2	N	Iron	19700		18800		mg/kg	2.3	RPD<20%
Off-site Soil Area 216	OFS-216-1	OFS-816-1	11-May-10	0	0.2	N	Lead	19	J	22	J	mg/kg	6.1	RPD<20%
Off-site Soil Area 216	OFS-216-1	OFS-816-1	11-May-10	0	0.2	N	Magnesium	5,910		5,630		mg/kg	2.4	RPD<20%
Off-site Soil Area 216	OFS-216-1	OFS-816-1	11-May-10	0	0.2	N	Manganese	621		523		mg/kg	8.6	RPD<20%
Off-site Soil Area 216	OFS-216-1	OFS-816-1	11-May-10	0	0.2	N	Nickel	16.4		16.4		mg/kg	0.0	RPD<20%
Off-site Soil Area 216	OFS-216-1	OFS-816-1	11-May-10	0	0.2	N	Potassium	3,550	J+	3,400	J+	mg/kg	2.2	RPD<20%
Off-site Soil Area 216	OFS-216-1	OFS-816-1	11-May-10	0	0.2	N	Sodium	282	J	205	J	mg/kg	15.8	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 216	OFS-216-1	OFS-816-1	11-May-10	0	0.2	N	Vanadium	41		40.7		mg/kg	0.4	RPD<20%
Off-site Soil Area 216	OFS-216-1	OFS-816-1	11-May-10	0	0.2	N	Zinc	115	J	103	J	mg/kg	5.5	RPD<20%
Off-site Soil Area 217	OFS-217-1	OFS-817-1	11-May-10	0	0.2	N	Aluminum	10300	J	10700	J	mg/kg	1.9	RPD<20%
Off-site Soil Area 217	OFS-217-1	OFS-817-1	11-May-10	0	0.2	N	Arsenic	22.5	J	22.8	J	mg/kg	0.7	RPD<20%
Off-site Soil Area 217	OFS-217-1	OFS-817-1	11-May-10	0	0.2	N	Barium	144	J	152	J	mg/kg	2.7	RPD<20%
Off-site Soil Area 217	OFS-217-1	OFS-817-1	11-May-10	0	0.2	N	Beryllium	0.52		0.54		mg/kg	1.9	RPD<20%
Off-site Soil Area 217	OFS-217-1	OFS-817-1	11-May-10	0	0.2	N	Cadmium	1.2		1.3		mg/kg	4.0	RPD<20%
Off-site Soil Area 217	OFS-217-1	OFS-817-1	11-May-10	0	0.2	N	Calcium	4360	J	4670	J	mg/kg	3.4	RPD<20%
Off-site Soil Area 217	OFS-217-1	OFS-817-1	11-May-10	0	0.2	N	Chromium	14	J	14	J	mg/kg	1.1	RPD<20%
Off-site Soil Area 217	OFS-217-1	OFS-817-1	11-May-10	0	0.2	N	Cobalt	8		8.8		mg/kg	4.8	RPD<20%
Off-site Soil Area 217	OFS-217-1	OFS-817-1	11-May-10	0	0.2	N	Copper	187	J	72	J	mg/kg	**44.3**	Soil - RPD<20%
Off-site Soil Area 217	OFS-217-1	OFS-817-1	11-May-10	0	0.2	N	Iron	19300		19600		mg/kg	0.8	RPD<20%
Off-site Soil Area 217	OFS-217-1	OFS-817-1	11-May-10	0	0.2	N	Lead	31.4	J	35.3	J	mg/kg	5.8	RPD<20%
Off-site Soil Area 217	OFS-217-1	OFS-817-1	11-May-10	0	0.2	N	Magnesium	4440		4720		mg/kg	3.1	RPD<20%
Off-site Soil Area 217	OFS-217-1	OFS-817-1	11-May-10	0	0.2	N	Manganese	427		479		mg/kg	5.7	RPD<20%
Off-site Soil Area 217	OFS-217-1	OFS-817-1	11-May-10	0	0.2	N	Nickel	12.9		13.1		mg/kg	0.8	RPD<20%
Off-site Soil Area 217	OFS-217-1	OFS-817-1	11-May-10	0	0.2	N	Potassium	2060	J+	2120	J+	mg/kg	1.4	RPD<20%
Off-site Soil Area 217	OFS-217-1	OFS-817-1	11-May-10	0	0.2	N	Sodium	36.9	J	37.9	J	mg/kg	1.3	RPD<20%
Off-site Soil Area 217	OFS-217-1	OFS-817-1	11-May-10	0	0.2	N	Vanadium	36		36		mg/kg	0.4	RPD<20%
Off-site Soil Area 217	OFS-217-1	OFS-817-1	11-May-10	0	0.2	N	Zinc	124	J	128	J	mg/kg	1.6	RPD<20%
Off-site Soil Area 218	OFS-218-1	OFS-818-1	10-May-10	0	0.2	N	Aluminum	11200		10200		mg/kg	4.7	RPD<20%
Off-site Soil Area 218	OFS-218-1	OFS-818-1	10-May-10	0	0.2	N	Antimony	1.1	J	1.4	J	mg/kg	12.0	RPD<20%
Off-site Soil Area 218	OFS-218-1	OFS-818-1	10-May-10	0	0.2	N	Arsenic	26.2	J	24.7	J	mg/kg	2.9	RPD<20%
Off-site Soil Area 218	OFS-218-1	OFS-818-1	10-May-10	0	0.2	N	Barium	171		151		mg/kg	6.2	RPD<20%
Off-site Soil Area 218	OFS-218-1	OFS-818-1	10-May-10	0	0.2	N	Cadmium	1		0.93		mg/kg	3.6	RPD<20%
Off-site Soil Area 218	OFS-218-1	OFS-818-1	10-May-10	0	0.2	N	Calcium	10300		12800		mg/kg	10.8	RPD<20%
Off-site Soil Area 218	OFS-218-1	OFS-818-1	10-May-10	0	0.2	N	Chromium	11.9		11.8		mg/kg	0.4	RPD<20%
Off-site Soil Area 218	OFS-218-1	OFS-818-1	10-May-10	0	0.2	N	Cobalt	9.5		7.7		mg/kg	10.5	RPD<20%
Off-site Soil Area 218	OFS-218-1	OFS-818-1	10-May-10	0	0.2	N	Copper	34.1		30.6		mg/kg	5.4	RPD<20%
Off-site Soil Area 218	OFS-218-1	OFS-818-1	10-May-10	0	0.2	N	Iron	18200		16500		mg/kg	4.9	RPD<20%
Off-site Soil Area 218	OFS-218-1	OFS-818-1	10-May-10	0	0.2	N	Lead	34.7		30.4		mg/kg	6.6	RPD<20%
Off-site Soil Area 218	OFS-218-1	OFS-818-1	10-May-10	0	0.2	N	Magnesium	6230		7790		mg/kg	11.1	RPD<20%
Off-site Soil Area 218	OFS-218-1	OFS-818-1	10-May-10	0	0.2	N	Manganese	596.0		492		mg/kg	9.6	RPD<20%
Off-site Soil Area 218	OFS-218-1	OFS-818-1	10-May-10	0	0.2	N	Mercury	0		0	J	mg/kg	9.1	RPD<20%
Off-site Soil Area 218	OFS-218-1	OFS-818-1	10-May-10	0	0.2	N	Nickel	11.8		10.9		mg/kg	4.0	RPD<20%
Off-site Soil Area 218	OFS-218-1	OFS-818-1	10-May-10	0	0.2	N	Potassium	3010	J+	2770	J+	mg/kg	4.2	RPD<20%
Off-site Soil Area 218	OFS-218-1	OFS-818-1	10-May-10	0	0.2	N	Sodium	261	J	239	J	mg/kg	4.4	RPD<20%
Off-site Soil Area 218	OFS-218-1	OFS-818-1	10-May-10	0	0.2	N	Vanadium	33		31		mg/kg	3.9	RPD<20%
Off-site Soil Area 218	OFS-218-1	OFS-818-1	10-May-10	0	0.2	N	Zinc	133		122		mg/kg	4.3	RPD<20%
Off-site Soil Area 219	OFS-219-1	OFS-819-1	10-May-10	0	0.2	N	Aluminum	7,980		7,960		mg/kg	0.1	RPD<20%
Off-site Soil Area 219	OFS-219-1	OFS-819-1	10-May-10	0	0.2	N	Antimony	0.9	J	0.84	J	mg/kg	3.4	RPD<20%
Off-site Soil Area 219	OFS-219-1	OFS-819-1	10-May-10	0	0.2	N	Arsenic	13.9	J	13.4	J	mg/kg	1.8	RPD<20%
Off-site Soil Area 219	OFS-219-1	OFS-819-1	10-May-10	0	0.2	N	Barium	105		104		mg/kg	0.5	RPD<20%
Off-site Soil Area 219	OFS-219-1	OFS-819-1	10-May-10	0	0.2	N	Cadmium	1.1		0.96		mg/kg	6.8	RPD<20%
Off-site Soil Area 219	OFS-219-1	OFS-819-1	10-May-10	0	0.2	N	Calcium	5,260		4,690		mg/kg	5.7	RPD<20%
Off-site Soil Area 219	OFS-219-1	OFS-819-1	10-May-10	0	0.2	N	Chromium	9.9		9.5		mg/kg	2.1	RPD<20%
Off-site Soil Area 219	OFS-219-1	OFS-819-1	10-May-10	0	0.2	N	Cobalt	8.2		7.9		mg/kg	1.9	RPD<20%
Off-site Soil Area 219	OFS-219-1	OFS-819-1	10-May-10	0	0.2	N	Copper	38		32		mg/kg	8.7	RPD<20%
Off-site Soil Area 219	OFS-219-1	OFS-819-1	10-May-10	0	0.2	N	Iron	16200		14500		mg/kg	5.5	RPD<20%
Off-site Soil Area 219	OFS-219-1	OFS-819-1	10-May-10	0	0.2	N	Lead	28.5		23.8		mg/kg	9.0	RPD<20%
Off-site Soil Area 219	OFS-219-1	OFS-819-1	10-May-10	0	0.2	N	Magnesium	4190		4070		mg/kg	1.5	RPD<20%
Off-site Soil Area 219	OFS-219-1	OFS-819-1	10-May-10	0	0.2	N	Manganese	458		449		mg/kg	1.0	RPD<20%
Off-site Soil Area 219	OFS-219-1	OFS-819-1	10-May-10	0	0.2	N	Mercury	0.036	J	0.061	J	mg/kg	**25.8**	Soil - RPD<20%
Off-site Soil Area 219	OFS-219-1	OFS-819-1	10-May-10	0	0.2	N	Nickel	10		9		mg/kg	8.9	RPD<20%
Off-site Soil Area 219	OFS-219-1	OFS-819-1	10-May-10	0	0.2	N	Potassium	2240	J+	2100	J+	mg/kg	3.2	RPD<20%
Off-site Soil Area 219	OFS-219-1	OFS-819-1	10-May-10	0	0.2	N	Sodium	51.7	J	47.4	J	mg/kg	4.3	RPD<20%
Off-site Soil Area 219	OFS-219-1	OFS-819-1	10-May-10	0	0.2	N	Vanadium	28		28		mg/kg	0.7	RPD<20%
Off-site Soil Area 219	OFS-219-1	OFS-819-1	10-May-10	0	0.2	N	Zinc	173		97.3		mg/kg	**28.0**	Soil - RPD<20%
Off-site Soil Area 220	OFS-220-1	OFS-820-1	10-May-10	0	0.2	N	Aluminum	11500		12300		mg/kg	3.4	RPD<20%
Off-site Soil Area 220	OFS-220-1	OFS-820-1	10-May-10	0	0.2	N	Antimony	0.59	J	0.55	J	mg/kg	3.5	RPD<20%
Off-site Soil Area 220	OFS-220-1	OFS-820-1	10-May-10	0	0.2	N	Arsenic	19.6		21.1		mg/kg	3.7	RPD<20%
Off-site Soil Area 220	OFS-220-1	OFS-820-1	10-May-10	0	0.2	N	Barium	129		135		mg/kg	2.3	RPD<20%
Off-site Soil Area 220	OFS-220-1	OFS-820-1	10-May-10	0	0.2	N	Beryllium	0.47	J	0.48	J	mg/kg	1.1	RPD<20%
Off-site Soil Area 220	OFS-220-1	OFS-820-1	10-May-10	0	0.2	N	Calcium	8340		7820		mg/kg	3.2	RPD<20%
Off-site Soil Area 220	OFS-220-1	OFS-820-1	10-May-10	0	0.2	N	Chromium	17.3		18.3		mg/kg	2.8	RPD<20%
Off-site Soil Area 220	OFS-220-1	OFS-820-1	10-May-10	0	0.2	N	Cobalt	12		12		mg/kg	2.9	RPD<20%
Off-site Soil Area 220	OFS-220-1	OFS-820-1	10-May-10	0	0.2	N	Copper	76.3		77.1		mg/kg	0.5	RPD<20%
Off-site Soil Area 220	OFS-220-1	OFS-820-1	10-May-10	0	0.2	N	Iron	22200		23500		mg/kg	2.8	RPD<20%
Off-site Soil Area 220	OFS-220-1	OFS-820-1	10-May-10	0	0.2	N	Lead	31.2		31.9		mg/kg	1.1	RPD<20%
Off-site Soil Area 220	OFS-220-1	OFS-820-1	10-May-10	0	0.2	N	Magnesium	6170		6320		mg/kg	1.2	RPD<20%
Off-site Soil Area 220	OFS-220-1	OFS-820-1	10-May-10	0	0.2	N	Manganese	609		641		mg/kg	2.6	RPD<20%
Off-site Soil Area 220	OFS-220-1	OFS-820-1	10-May-10	0	0.2	N	Mercury	0.062	J	0.037	J	mg/kg	**25.3**	Soil - RPD<20%
Off-site Soil Area 220	OFS-220-1	OFS-820-1	10-May-10	0	0.2	N	Nickel	14.9		15.4		mg/kg	1.7	RPD<20%
Off-site Soil Area 220	OFS-220-1	OFS-820-1	10-May-10	0	0.2	N	Potassium	3700	J+	3800	J+	mg/kg	1.3	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 220	OFS-220-1	OFS-820-1	10-May-10	0	0.2	N	Silver	0	J	0	J	mg/kg	11.6	RPD<20%
Off-site Soil Area 220	OFS-220-1	OFS-820-1	10-May-10	0	0.2	N	Sodium	72	J	81.6	J	mg/kg	6.3	RPD<20%
Off-site Soil Area 220	OFS-220-1	OFS-820-1	10-May-10	0	0.2	N	Vanadium	44		47		mg/kg	3.5	RPD<20%
Off-site Soil Area 220	OFS-220-1	OFS-820-1	10-May-10	0	0.2	N	Zinc	102		103		mg/kg	0.5	RPD<20%
Off-site Soil Area 221	OFS-221-1	OFS-821-1	11-May-10	0	0.2	N	Aluminum	14800		13900		mg/kg	3.1	RPD<20%
Off-site Soil Area 221	OFS-221-1	OFS-821-1	11-May-10	0	0.2	N	Antimony	1.7	J	1.7	J	mg/kg	0.0	RPD<20%
Off-site Soil Area 221	OFS-221-1	OFS-821-1	11-May-10	0	0.2	N	Arsenic	55.6		57.3		mg/kg	1.5	RPD<20%
Off-site Soil Area 221	OFS-221-1	OFS-821-1	11-May-10	0	0.2	N	Barium	264		251		mg/kg	2.5	RPD<20%
Off-site Soil Area 221	OFS-221-1	OFS-821-1	11-May-10	0	0.2	N	Beryllium	0.86		0.84		mg/kg	1.2	RPD<20%
Off-site Soil Area 221	OFS-221-1	OFS-821-1	11-May-10	0	0.2	N	Cadmium	4		4		mg/kg	1.4	RPD<20%
Off-site Soil Area 221	OFS-221-1	OFS-821-1	11-May-10	0	0.2	N	Calcium	5600		5450		mg/kg	1.4	RPD<20%
Off-site Soil Area 221	OFS-221-1	OFS-821-1	11-May-10	0	0.2	N	Chromium	32.8		32.2		mg/kg	0.9	RPD<20%
Off-site Soil Area 221	OFS-221-1	OFS-821-1	11-May-10	0	0.2	N	Cobalt	15.7		15		mg/kg	2.3	RPD<20%
Off-site Soil Area 221	OFS-221-1	OFS-821-1	11-May-10	0	0.2	N	Copper	515		479		mg/kg	3.6	RPD<20%
Off-site Soil Area 221	OFS-221-1	OFS-821-1	11-May-10	0	0.2	N	Iron	20400		20100		mg/kg	0.7	RPD<20%
Off-site Soil Area 221	OFS-221-1	OFS-821-1	11-May-10	0	0.2	N	Lead	113		106.0		mg/kg	3.2	RPD<20%
Off-site Soil Area 221	OFS-221-1	OFS-821-1	11-May-10	0	0.2	N	Magnesium	5830		5410		mg/kg	3.7	RPD<20%
Off-site Soil Area 221	OFS-221-1	OFS-821-1	11-May-10	0	0.2	N	Manganese	844		776		mg/kg	4.2	RPD<20%
Off-site Soil Area 221	OFS-221-1	OFS-821-1	11-May-10	0	0.2	N	Mercury	0.17		0.16		mg/kg	3.0	RPD<20%
Off-site Soil Area 221	OFS-221-1	OFS-821-1	11-May-10	0	0.2	N	Nickel	42.4		40.3		mg/kg	2.5	RPD<20%
Off-site Soil Area 221	OFS-221-1	OFS-821-1	11-May-10	0	0.2	N	Potassium	2680	J+	2470	J+	mg/kg	4.1	RPD<20%
Off-site Soil Area 221	OFS-221-1	OFS-821-1	11-May-10	0	0.2	N	Selenium	0.54	J	0.35	J	mg/kg	**21.3**	Soil - RPD<20%
Off-site Soil Area 221	OFS-221-1	OFS-821-1	11-May-10	0	0.2	N	Vanadium	49.8		50		mg/kg	0.2	RPD<20%
Off-site Soil Area 221	OFS-221-1	OFS-821-1	11-May-10	0	0.2	N	Zinc	283		262		mg/kg	3.9	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Aluminum	15400		14200		mg/kg	4.1	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Antimony	0.67	J	0.57	J	mg/kg	8.1	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Arsenic	52.8		47.4		mg/kg	5.4	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Barium	236		194		mg/kg	9.8	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Beryllium	1		1		mg/kg	0.9	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Cadmium	1.5	J	1.5	J	mg/kg	0.0	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Calcium	8220		8420		mg/kg	1.2	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Chromium	20.6		21.4		mg/kg	1.9	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Cobalt	12		11.9		mg/kg	0.4	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Copper	522		496		mg/kg	2.6	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Cyanide	0.39	J	0.44	J	mg/kg	6.0	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Iron	24,600		23,800		mg/kg	1.7	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Lead	266		279		mg/kg	2.4	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Magnesium	6,220		6,100		mg/kg	1.0	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Manganese	565		554		mg/kg	1.0	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Mercury	0	J+	0	J+	mg/kg	6.1	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Nickel	19.1		18.8		mg/kg	0.8	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Potassium	2910		2730		mg/kg	3.2	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Silver	2.6		2.4		mg/kg	4.0	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Sodium	97.5	J	74.7	J	mg/kg	13.2	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Vanadium	39.7		38.1		mg/kg	2.1	RPD<20%
Off-site Soil Area 222	OFS-222-1	OFS-822-1	12-May-10	0	0.2	N	Zinc	526		436		mg/kg	9.4	RPD<20%
Off-site Soil Area 223	OFS-223-1	OFS-823-1	10-May-10	0	0.2	N	Aluminum	6710		6040		mg/kg	5.3	RPD<20%
Off-site Soil Area 223	OFS-223-1	OFS-823-1	10-May-10	0	0.2	N	Antimony	1	J	1	J	mg/kg	12.9	RPD<20%
Off-site Soil Area 223	OFS-223-1	OFS-823-1	10-May-10	0	0.2	N	Arsenic	46		42		mg/kg	5.0	RPD<20%
Off-site Soil Area 223	OFS-223-1	OFS-823-1	10-May-10	0	0.2	N	Barium	91		79		mg/kg	7.2	RPD<20%
Off-site Soil Area 223	OFS-223-1	OFS-823-1	10-May-10	0	0.2	N	Cadmium	1.2		1.1		mg/kg	4.3	RPD<20%
Off-site Soil Area 223	OFS-223-1	OFS-823-1	10-May-10	0	0.2	N	Calcium	11500		12500		mg/kg	4.2	RPD<20%
Off-site Soil Area 223	OFS-223-1	OFS-823-1	10-May-10	0	0.2	N	Chromium	10		9		mg/kg	8.3	RPD<20%
Off-site Soil Area 223	OFS-223-1	OFS-823-1	10-May-10	0	0.2	N	Cobalt	7.6		6.7		mg/kg	6.3	RPD<20%
Off-site Soil Area 223	OFS-223-1	OFS-823-1	10-May-10	0	0.2	N	Copper	49.5		39.1		mg/kg	11.7	RPD<20%
Off-site Soil Area 223	OFS-223-1	OFS-823-1	10-May-10	0	0.2	N	Iron	15300		13400		mg/kg	6.6	RPD<20%
Off-site Soil Area 223	OFS-223-1	OFS-823-1	10-May-10	0	0.2	N	Lead	115		97		mg/kg	8.6	RPD<20%
Off-site Soil Area 223	OFS-223-1	OFS-823-1	10-May-10	0	0.2	N	Magnesium	4460		4050		mg/kg	4.8	RPD<20%
Off-site Soil Area 223	OFS-223-1	OFS-823-1	10-May-10	0	0.2	N	Manganese	412		432		mg/kg	2.4	RPD<20%
Off-site Soil Area 223	OFS-223-1	OFS-823-1	10-May-10	0	0.2	N	Mercury	0		0		mg/kg	18.4	RPD<20%
Off-site Soil Area 223	OFS-223-1	OFS-823-1	10-May-10	0	0.2	N	Nickel	9.5		9.3		mg/kg	1.1	RPD<20%
Off-site Soil Area 223	OFS-223-1	OFS-823-1	10-May-10	0	0.2	N	Potassium	7600	J+	7100	J+	mg/kg	3.4	RPD<20%
Off-site Soil Area 223	OFS-223-1	OFS-823-1	10-May-10	0	0.2	N	Selenium	0.92	J	0.5	J	mg/kg	**29.6**	Soil - RPD<20%
Off-site Soil Area 223	OFS-223-1	OFS-823-1	10-May-10	0	0.2	N	Silver	0.6	J	0.49	J	mg/kg	9.3	RPD<20%
Off-site Soil Area 223	OFS-223-1	OFS-823-1	10-May-10	0	0.2	N	Sodium	1,330		1,260		mg/kg	2.7	RPD<20%
Off-site Soil Area 223	OFS-223-1	OFS-823-1	10-May-10	0	0.2	N	Vanadium	25.4		23.3		mg/kg	4.3	RPD<20%
Off-site Soil Area 223	OFS-223-1	OFS-823-1	10-May-10	0	0.2	N	Zinc	337		306		mg/kg	4.8	RPD<20%
Off-site Soil Area 224	OFS-224-1	OFS-824-1	10-May-10	0	0.2	N	Aluminum	5,880		5,630		mg/kg	2.2	RPD<20%
Off-site Soil Area 224	OFS-224-1	OFS-824-1	10-May-10	0	0.2	N	Arsenic	21.8		20.1		mg/kg	4.1	RPD<20%
Off-site Soil Area 224	OFS-224-1	OFS-824-1	10-May-10	0	0.2	N	Barium	80.3		84.7		mg/kg	2.7	RPD<20%
Off-site Soil Area 224	OFS-224-1	OFS-824-1	10-May-10	0	0.2	N	Cadmium	0.91		0.9		mg/kg	0.6	RPD<20%
Off-site Soil Area 224	OFS-224-1	OFS-824-1	10-May-10	0	0.2	N	Calcium	3430		3160		mg/kg	4.1	RPD<20%
Off-site Soil Area 224	OFS-224-1	OFS-824-1	10-May-10	0	0.2	N	Chromium	10		9		mg/kg	5.5	RPD<20%
Off-site Soil Area 224	OFS-224-1	OFS-824-1	10-May-10	0	0.2	N	Cobalt	6.4		6.7		mg/kg	2.3	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 224	OFS-224-1	OFS-824-1	10-May-10	0	0.2	N	Copper	22.5		21.2		mg/kg	3.0	RPD<20%
Off-site Soil Area 224	OFS-224-1	OFS-824-1	10-May-10	0	0.2	N	Iron	13,300		13,200		mg/kg	0.4	RPD<20%
Off-site Soil Area 224	OFS-224-1	OFS-824-1	10-May-10	0	0.2	N	Lead	29.7		30.7		mg/kg	1.7	RPD<20%
Off-site Soil Area 224	OFS-224-1	OFS-824-1	10-May-10	0	0.2	N	Magnesium	3,040		2,990		mg/kg	0.8	RPD<20%
Off-site Soil Area 224	OFS-224-1	OFS-824-1	10-May-10	0	0.2	N	Manganese	423		456		mg/kg	3.8	RPD<20%
Off-site Soil Area 224	OFS-224-1	OFS-824-1	10-May-10	0	0.2	N	Mercury	0		0	J	mg/kg	17.6	RPD<20%
Off-site Soil Area 224	OFS-224-1	OFS-824-1	10-May-10	0	0.2	N	Nickel	8		8		mg/kg	1.9	RPD<20%
Off-site Soil Area 224	OFS-224-1	OFS-824-1	10-May-10	0	0.2	N	Potassium	2070	J+	2060	J+	mg/kg	0.2	RPD<20%
Off-site Soil Area 224	OFS-224-1	OFS-824-1	10-May-10	0	0.2	N	Silver	0	J	0	J	mg/kg	9.0	RPD<20%
Off-site Soil Area 224	OFS-224-1	OFS-824-1	10-May-10	0	0.2	N	Vanadium	23.4		23.1		mg/kg	0.6	RPD<20%
Off-site Soil Area 224	OFS-224-1	OFS-824-1	10-May-10	0	0.2	N	Zinc	116		115		mg/kg	0.4	RPD<20%
Off-site Soil Area 225	OFS-225-1	OFS-825-1	10-May-10	0	0.2	N	Aluminum	6590.0		7070		mg/kg	3.5	RPD<20%
Off-site Soil Area 225	OFS-225-1	OFS-825-1	10-May-10	0	0.2	N	Arsenic	68.3		72.6		mg/kg	3.1	RPD<20%
Off-site Soil Area 225	OFS-225-1	OFS-825-1	10-May-10	0	0.2	N	Barium	89.1		85.5		mg/kg	2.1	RPD<20%
Off-site Soil Area 225	OFS-225-1	OFS-825-1	10-May-10	0	0.2	N	Cadmium	2.8		3.7		mg/kg	13.8	RPD<20%
Off-site Soil Area 225	OFS-225-1	OFS-825-1	10-May-10	0	0.2	N	Calcium	7170		4150		mg/kg	**26.7**	Soil - RPD<20%
Off-site Soil Area 225	OFS-225-1	OFS-825-1	10-May-10	0	0.2	N	Chromium	9.3		9.9		mg/kg	3.1	RPD<20%
Off-site Soil Area 225	OFS-225-1	OFS-825-1	10-May-10	0	0.2	N	Copper	52.6		66.1		mg/kg	11.4	RPD<20%
Off-site Soil Area 225	OFS-225-1	OFS-825-1	10-May-10	0	0.2	N	Iron	17000		18600		mg/kg	4.5	RPD<20%
Off-site Soil Area 225	OFS-225-1	OFS-825-1	10-May-10	0	0.2	N	Lead	217		351		mg/kg	**23.6**	Soil - RPD<20%
Off-site Soil Area 225	OFS-225-1	OFS-825-1	10-May-10	0	0.2	N	Magnesium	4380		4020		mg/kg	4.3	RPD<20%
Off-site Soil Area 225	OFS-225-1	OFS-825-1	10-May-10	0	0.2	N	Manganese	362		333		mg/kg	4.2	RPD<20%
Off-site Soil Area 225	OFS-225-1	OFS-825-1	10-May-10	0	0.2	N	Mercury	0.91		1.1		mg/kg	9.5	RPD<20%
Off-site Soil Area 225	OFS-225-1	OFS-825-1	10-May-10	0	0.2	N	Nickel	7.8		8.5		mg/kg	4.3	RPD<20%
Off-site Soil Area 225	OFS-225-1	OFS-825-1	10-May-10	0	0.2	N	Potassium	4,240	J+	3,720	J+	mg/kg	6.5	RPD<20%
Off-site Soil Area 225	OFS-225-1	OFS-825-1	10-May-10	0	0.2	N	Selenium	2.5	J	1.8	J	mg/kg	16.3	RPD<20%
Off-site Soil Area 225	OFS-225-1	OFS-825-1	10-May-10	0	0.2	N	Silver	0.65	J	1	J	mg/kg	**21.2**	Soil - RPD<20%
Off-site Soil Area 225	OFS-225-1	OFS-825-1	10-May-10	0	0.2	N	Vanadium	24.7		25.5		mg/kg	1.6	RPD<20%
Off-site Soil Area 225	OFS-225-1	OFS-825-1	10-May-10	0	0.2	N	Zinc	540		769		mg/kg	17.5	RPD<20%
Off-site Soil Area 226	OFS-226-1	OFS-826-1	10-May-10	0	0.2	N	Aluminum	9,840		9,820		mg/kg	0.1	RPD<20%
Off-site Soil Area 226	OFS-226-1	OFS-826-1	10-May-10	0	0.2	N	Antimony	1	J	1	J	mg/kg	6.0	RPD<20%
Off-site Soil Area 226	OFS-226-1	OFS-826-1	10-May-10	0	0.2	N	Arsenic	133		131		mg/kg	0.8	RPD<20%
Off-site Soil Area 226	OFS-226-1	OFS-826-1	10-May-10	0	0.2	N	Barium	92.7		80.7		mg/kg	6.9	RPD<20%
Off-site Soil Area 226	OFS-226-1	OFS-826-1	10-May-10	0	0.2	N	Beryllium	0	J	0	J	mg/kg	2.6	RPD<20%
Off-site Soil Area 226	OFS-226-1	OFS-826-1	10-May-10	0	0.2	N	Cadmium	1.3		1.5		mg/kg	7.1	RPD<20%
Off-site Soil Area 226	OFS-226-1	OFS-826-1	10-May-10	0	0.2	N	Calcium	6540		5740		mg/kg	6.5	RPD<20%
Off-site Soil Area 226	OFS-226-1	OFS-826-1	10-May-10	0	0.2	N	Chromium	13.4		12.6		mg/kg	3.1	RPD<20%
Off-site Soil Area 226	OFS-226-1	OFS-826-1	10-May-10	0	0.2	N	Cobalt	11.4		11.7		mg/kg	1.3	RPD<20%
Off-site Soil Area 226	OFS-226-1	OFS-826-1	10-May-10	0	0.2	N	Copper	39		46		mg/kg	8.1	RPD<20%
Off-site Soil Area 226	OFS-226-1	OFS-826-1	10-May-10	0	0.2	N	Iron	24,200		26,100		mg/kg	3.8	RPD<20%
Off-site Soil Area 226	OFS-226-1	OFS-826-1	10-May-10	0	0.2	N	Lead	97.6		90.1		mg/kg	4.0	RPD<20%
Off-site Soil Area 226	OFS-226-1	OFS-826-1	10-May-10	0	0.2	N	Magnesium	5340		5060		mg/kg	2.7	RPD<20%
Off-site Soil Area 226	OFS-226-1	OFS-826-1	10-May-10	0	0.2	N	Manganese	585		541		mg/kg	3.9	RPD<20%
Off-site Soil Area 226	OFS-226-1	OFS-826-1	10-May-10	0	0.2	N	Mercury	0.33		0.26		mg/kg	11.9	RPD<20%
Off-site Soil Area 226	OFS-226-1	OFS-826-1	10-May-10	0	0.2	N	Nickel	12.9		11.9		mg/kg	4.0	RPD<20%
Off-site Soil Area 226	OFS-226-1	OFS-826-1	10-May-10	0	0.2	N	Potassium	2960	J+	2470	J+	mg/kg	9.0	RPD<20%
Off-site Soil Area 226	OFS-226-1	OFS-826-1	10-May-10	0	0.2	N	Selenium	1	J	1	J	mg/kg	11.7	RPD<20%
Off-site Soil Area 226	OFS-226-1	OFS-826-1	10-May-10	0	0.2	N	Silver	1	J	1	J	mg/kg	1.8	RPD<20%
Off-site Soil Area 226	OFS-226-1	OFS-826-1	10-May-10	0	0.2	N	Vanadium	40.6		45.1		mg/kg	5.3	RPD<20%
Off-site Soil Area 226	OFS-226-1	OFS-826-1	10-May-10	0	0.2	N	Zinc	365		370		mg/kg	0.7	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Aluminum	16700		15300		mg/kg	4.4	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Antimony	0.89	J	0.93	J	mg/kg	2.2	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Arsenic	137		107		mg/kg	12.3	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Barium	240		251		mg/kg	2.2	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Beryllium	1		1		mg/kg	4.7	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Cadmium	2.2		2.1		mg/kg	2.3	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Calcium	12500		13800		mg/kg	4.9	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Chromium	29.6		26.5		mg/kg	5.5	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Cobalt	15		14		mg/kg	4.5	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Copper	242		219		mg/kg	5.0	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Cyanide	0.33	J	0.27	J	mg/kg	10.0	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Iron	30300		26700		mg/kg	6.3	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Lead	171		141		mg/kg	9.6	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Magnesium	8390		7640		mg/kg	4.7	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Manganese	1310		1340		mg/kg	1.1	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Mercury	0.42		0.47		mg/kg	5.6	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Nickel	31		28		mg/kg	5.3	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Potassium	4890	J+	4410	J+	mg/kg	5.2	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Selenium	1.6	J	1	J	mg/kg	**23.1**	Soil - RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Silver	1.2		1		mg/kg	9.1	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Sodium	108	J	127	J	mg/kg	8.1	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Vanadium	54.2		49.1		mg/kg	4.9	RPD<20%
Off-site Soil Area 227	OFS-227-1	OFS-827-1	10-May-10	0	0.2	N	Zinc	586		522		mg/kg	5.8	RPD<20%
Off-site Soil Area 228	OFS-228-1	OFS-828-1	10-May-10	0	0.2	N	Aluminum	13,900		12,600		mg/kg	4.9	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 228	OFS-228-1	OFS-828-1	10-May-10	0	0.2	N	Arsenic	6.3		5.6		mg/kg	5.9	RPD<20%
Off-site Soil Area 228	OFS-228-1	OFS-828-1	10-May-10	0	0.2	N	Barium	268		280		mg/kg	2.2	RPD<20%
Off-site Soil Area 228	OFS-228-1	OFS-828-1	10-May-10	0	0.2	N	Beryllium	0.81		0.81		mg/kg	0.0	RPD<20%
Off-site Soil Area 228	OFS-228-1	OFS-828-1	10-May-10	0	0.2	N	Calcium	77000		75300		mg/kg	1.1	RPD<20%
Off-site Soil Area 228	OFS-228-1	OFS-828-1	10-May-10	0	0.2	N	Chromium	18.8		17.2		mg/kg	4.4	RPD<20%
Off-site Soil Area 228	OFS-228-1	OFS-828-1	10-May-10	0	0.2	N	Cobalt	9.5		9.7		mg/kg	1.0	RPD<20%
Off-site Soil Area 228	OFS-228-1	OFS-828-1	10-May-10	0	0.2	N	Copper	39.9		35.2		mg/kg	6.3	RPD<20%
Off-site Soil Area 228	OFS-228-1	OFS-828-1	10-May-10	0	0.2	N	Iron	14500		13700		mg/kg	2.8	RPD<20%
Off-site Soil Area 228	OFS-228-1	OFS-828-1	10-May-10	0	0.2	N	Lead	15	J	16	J	mg/kg	2.6	RPD<20%
Off-site Soil Area 228	OFS-228-1	OFS-828-1	10-May-10	0	0.2	N	Magnesium	6720		6160		mg/kg	4.3	RPD<20%
Off-site Soil Area 228	OFS-228-1	OFS-828-1	10-May-10	0	0.2	N	Manganese	418		483		mg/kg	7.2	RPD<20%
Off-site Soil Area 228	OFS-228-1	OFS-828-1	10-May-10	0	0.2	N	Nickel	24.9		23.3		mg/kg	3.3	RPD<20%
Off-site Soil Area 228	OFS-228-1	OFS-828-1	10-May-10	0	0.2	N	Potassium	2760	J+	2410	J+	mg/kg	6.8	RPD<20%
Off-site Soil Area 228	OFS-228-1	OFS-828-1	10-May-10	0	0.2	N	Selenium	0.49	J	0.66	J	mg/kg	14.8	RPD<20%
Off-site Soil Area 228	OFS-228-1	OFS-828-1	10-May-10	0	0.2	N	Sodium	209	J	204	J	mg/kg	1.2	RPD<20%
Off-site Soil Area 228	OFS-228-1	OFS-828-1	10-May-10	0	0.2	N	Vanadium	35.3		35.4		mg/kg	0.1	RPD<20%
Off-site Soil Area 228	OFS-228-1	OFS-828-1	10-May-10	0	0.2	N	Zinc	52.6		44.1		mg/kg	8.8	RPD<20%
Off-site Soil Area 229	OFS-229-1	OFS-829-1	10-May-10	0	0.2	N	Aluminum	11300		11900		mg/kg	2.6	RPD<20%
Off-site Soil Area 229	OFS-229-1	OFS-829-1	10-May-10	0	0.2	N	Arsenic	42.9		40.6		mg/kg	2.8	RPD<20%
Off-site Soil Area 229	OFS-229-1	OFS-829-1	10-May-10	0	0.2	N	Barium	229		204		mg/kg	5.8	RPD<20%
Off-site Soil Area 229	OFS-229-1	OFS-829-1	10-May-10	0	0.2	N	Beryllium	0.62		0.64		mg/kg	1.6	RPD<20%
Off-site Soil Area 229	OFS-229-1	OFS-829-1	10-May-10	0	0.2	N	Cadmium	3		4		mg/kg	4.3	RPD<20%
Off-site Soil Area 229	OFS-229-1	OFS-829-1	10-May-10	0	0.2	N	Calcium	8490		9370		mg/kg	4.9	RPD<20%
Off-site Soil Area 229	OFS-229-1	OFS-829-1	10-May-10	0	0.2	N	Chromium	19.2		21.1		mg/kg	4.7	RPD<20%
Off-site Soil Area 229	OFS-229-1	OFS-829-1	10-May-10	0	0.2	N	Cobalt	10.4		11.2		mg/kg	3.7	RPD<20%
Off-site Soil Area 229	OFS-229-1	OFS-829-1	10-May-10	0	0.2	N	Copper	278		297		mg/kg	3.3	RPD<20%
Off-site Soil Area 229	OFS-229-1	OFS-829-1	10-May-10	0	0.2	N	Cyanide	1	J	0.85	J	mg/kg	8.1	RPD<20%
Off-site Soil Area 229	OFS-229-1	OFS-829-1	10-May-10	0	0.2	N	Iron	19,500		20,400		mg/kg	2.3	RPD<20%
Off-site Soil Area 229	OFS-229-1	OFS-829-1	10-May-10	0	0.2	N	Lead	340	J	284	J	mg/kg	9.0	RPD<20%
Off-site Soil Area 229	OFS-229-1	OFS-829-1	10-May-10	0	0.2	N	Magnesium	5240		5710		mg/kg	4.3	RPD<20%
Off-site Soil Area 229	OFS-229-1	OFS-829-1	10-May-10	0	0.2	N	Manganese	785		839		mg/kg	3.3	RPD<20%
Off-site Soil Area 229	OFS-229-1	OFS-829-1	10-May-10	0	0.2	N	Mercury	0		0		mg/kg	8.0	RPD<20%
Off-site Soil Area 229	OFS-229-1	OFS-829-1	10-May-10	0	0.2	N	Nickel	16.9		19.2		mg/kg	6.4	RPD<20%
Off-site Soil Area 229	OFS-229-1	OFS-829-1	10-May-10	0	0.2	N	Potassium	5140	J+	5500	J+	mg/kg	3.4	RPD<20%
Off-site Soil Area 229	OFS-229-1	OFS-829-1	10-May-10	0	0.2	N	Selenium	1.5	J	1.5	J	mg/kg	0.0	RPD<20%
Off-site Soil Area 229	OFS-229-1	OFS-829-1	10-May-10	0	0.2	N	Silver	2		2		mg/kg	0.0	RPD<20%
Off-site Soil Area 229	OFS-229-1	OFS-829-1	10-May-10	0	0.2	N	Vanadium	31.5		34.1		mg/kg	4.0	RPD<20%
Off-site Soil Area 229	OFS-229-1	OFS-829-1	10-May-10	0	0.2	N	Zinc	638		659		mg/kg	1.6	RPD<20%
Off-site Soil Area 230	OFS-230-1	OFS-830-1	11-May-10	0	0.2	N	Aluminum	6480		7700		mg/kg	8.6	RPD<20%
Off-site Soil Area 230	OFS-230-1	OFS-830-1	11-May-10	0	0.2	N	Arsenic	9.7		11.2		mg/kg	7.2	RPD<20%
Off-site Soil Area 230	OFS-230-1	OFS-830-1	11-May-10	0	0.2	N	Barium	80		86		mg/kg	3.5	RPD<20%
Off-site Soil Area 230	OFS-230-1	OFS-830-1	11-May-10	0	0.2	N	Beryllium	0.19	J	0.27	J	mg/kg	17.4	RPD<20%
Off-site Soil Area 230	OFS-230-1	OFS-830-1	11-May-10	0	0.2	N	Calcium	16200		15600		mg/kg	1.9	RPD<20%
Off-site Soil Area 230	OFS-230-1	OFS-830-1	11-May-10	0	0.2	N	Chromium	9		9.6		mg/kg	3.2	RPD<20%
Off-site Soil Area 230	OFS-230-1	OFS-830-1	11-May-10	0	0.2	N	Cobalt	6.5		7.6		mg/kg	7.8	RPD<20%
Off-site Soil Area 230	OFS-230-1	OFS-830-1	11-May-10	0	0.2	N	Copper	18.2		22		mg/kg	9.5	RPD<20%
Off-site Soil Area 230	OFS-230-1	OFS-830-1	11-May-10	0	0.2	N	Cyanide	0.23	J	0.3	J	mg/kg	13.2	RPD<20%
Off-site Soil Area 230	OFS-230-1	OFS-830-1	11-May-10	0	0.2	N	Iron	12000		14000		mg/kg	7.7	RPD<20%
Off-site Soil Area 230	OFS-230-1	OFS-830-1	11-May-10	0	0.2	N	Lead	10.4		14.5		mg/kg	16.5	RPD<20%
Off-site Soil Area 230	OFS-230-1	OFS-830-1	11-May-10	0	0.2	N	Magnesium	3340		3850		mg/kg	7.1	RPD<20%
Off-site Soil Area 230	OFS-230-1	OFS-830-1	11-May-10	0	0.2	N	Manganese	458		419		mg/kg	4.4	RPD<20%
Off-site Soil Area 230	OFS-230-1	OFS-830-1	11-May-10	0	0.2	N	Nickel	11.1		11.6		mg/kg	2.2	RPD<20%
Off-site Soil Area 230	OFS-230-1	OFS-830-1	11-May-10	0	0.2	N	Potassium	878		1050		mg/kg	8.9	RPD<20%
Off-site Soil Area 230	OFS-230-1	OFS-830-1	11-May-10	0	0.2	N	Sodium	41.4	J	48.4	J	mg/kg	7.8	RPD<20%
Off-site Soil Area 230	OFS-230-1	OFS-830-1	11-May-10	0	0.2	N	Vanadium	21.9		26.3		mg/kg	9.1	RPD<20%
Off-site Soil Area 230	OFS-230-1	OFS-830-1	11-May-10	0	0.2	N	Zinc	48		64		mg/kg	14.3	RPD<20%
Off-site Soil Area 231	OFS-231-1	OFS-831-1	11-May-10	0	0.2	N	Aluminum	9660		10200		mg/kg	2.7	RPD<20%
Off-site Soil Area 231	OFS-231-1	OFS-831-1	11-May-10	0	0.2	N	Arsenic	24.8	J	26.3	J	mg/kg	2.9	RPD<20%
Off-site Soil Area 231	OFS-231-1	OFS-831-1	11-May-10	0	0.2	N	Barium	151		164		mg/kg	4.1	RPD<20%
Off-site Soil Area 231	OFS-231-1	OFS-831-1	11-May-10	0	0.2	N	Beryllium	0.41	J	0.43	J	mg/kg	2.4	RPD<20%
Off-site Soil Area 231	OFS-231-1	OFS-831-1	11-May-10	0	0.2	N	Cadmium	1.8		1.9		mg/kg	2.7	RPD<20%
Off-site Soil Area 231	OFS-231-1	OFS-831-1	11-May-10	0	0.2	N	Calcium	5370		5440		mg/kg	0.6	RPD<20%
Off-site Soil Area 231	OFS-231-1	OFS-831-1	11-May-10	0	0.2	N	Chromium	17.3		17.9		mg/kg	1.7	RPD<20%
Off-site Soil Area 231	OFS-231-1	OFS-831-1	11-May-10	0	0.2	N	Cobalt	10.1		10.8		mg/kg	3.3	RPD<20%
Off-site Soil Area 231	OFS-231-1	OFS-831-1	11-May-10	0	0.2	N	Copper	102		106		mg/kg	1.9	RPD<20%
Off-site Soil Area 231	OFS-231-1	OFS-831-1	11-May-10	0	0.2	N	Iron	18,400		19,300		mg/kg	2.4	RPD<20%
Off-site Soil Area 231	OFS-231-1	OFS-831-1	11-May-10	0	0.2	N	Lead	80		79		mg/kg	0.8	RPD<20%
Off-site Soil Area 231	OFS-231-1	OFS-831-1	11-May-10	0	0.2	N	Magnesium	4930		5110		mg/kg	1.8	RPD<20%
Off-site Soil Area 231	OFS-231-1	OFS-831-1	11-May-10	0	0.2	N	Manganese	558		607		mg/kg	4.2	RPD<20%
Off-site Soil Area 231	OFS-231-1	OFS-831-1	11-May-10	0	0.2	N	Mercury	0.18		0.18		mg/kg	0.0	RPD<20%
Off-site Soil Area 231	OFS-231-1	OFS-831-1	11-May-10	0	0.2	N	Nickel	15.4		16.6		mg/kg	3.8	RPD<20%
Off-site Soil Area 231	OFS-231-1	OFS-831-1	11-May-10	0	0.2	N	Potassium	3320	J+	3380	J+	mg/kg	0.9	RPD<20%
Off-site Soil Area 231	OFS-231-1	OFS-831-1	11-May-10	0	0.2	N	Selenium	0.24	J	0.32	J	mg/kg	14.3	RPD<20%
Off-site Soil Area 231	OFS-231-1	OFS-831-1	11-May-10	0	0.2	N	Silver	0.23	J	0.26	J	mg/kg	6.1	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 231	OFS-231-1	OFS-831-1	11-May-10	0	0.2	N	Sodium	74.9	J	79.2	J	mg/kg	2.8	RPD<20%
Off-site Soil Area 231	OFS-231-1	OFS-831-1	11-May-10	0	0.2	N	Vanadium	39		42		mg/kg	3.7	RPD<20%
Off-site Soil Area 231	OFS-231-1	OFS-831-1	11-May-10	0	0.2	N	Zinc	219		222		mg/kg	0.7	RPD<20%
Off-site Soil Area 232	OFS-232-1	OFS-832-1	11-May-10	0	0.2	N	Aluminum	10,400		10,500		mg/kg	0.5	RPD<20%
Off-site Soil Area 232	OFS-232-1	OFS-832-1	11-May-10	0	0.2	N	Arsenic	17.1	J	20.5	J	mg/kg	9.0	RPD<20%
Off-site Soil Area 232	OFS-232-1	OFS-832-1	11-May-10	0	0.2	N	Barium	146		145		mg/kg	0.3	RPD<20%
Off-site Soil Area 232	OFS-232-1	OFS-832-1	11-May-10	0	0.2	N	Beryllium	0.067	J	0.075	J	mg/kg	5.6	RPD<20%
Off-site Soil Area 232	OFS-232-1	OFS-832-1	11-May-10	0	0.2	N	Cadmium	0.57	J	0.62	J	mg/kg	4.2	RPD<20%
Off-site Soil Area 232	OFS-232-1	OFS-832-1	11-May-10	0	0.2	N	Calcium	20700		20000		mg/kg	1.7	RPD<20%
Off-site Soil Area 232	OFS-232-1	OFS-832-1	11-May-10	0	0.2	N	Chromium	8		10		mg/kg	6.1	RPD<20%
Off-site Soil Area 232	OFS-232-1	OFS-832-1	11-May-10	0	0.2	N	Cobalt	11		10		mg/kg	1.4	RPD<20%
Off-site Soil Area 232	OFS-232-1	OFS-832-1	11-May-10	0	0.2	N	Copper	82.1	J	85.4	J	mg/kg	2.0	RPD<20%
Off-site Soil Area 232	OFS-232-1	OFS-832-1	11-May-10	0	0.2	N	Iron	13900		14400		mg/kg	1.8	RPD<20%
Off-site Soil Area 232	OFS-232-1	OFS-832-1	11-May-10	0	0.2	N	Lead	46.7		70.9		mg/kg	**20.6**	Soil - RPD<20%
Off-site Soil Area 232	OFS-232-1	OFS-832-1	11-May-10	0	0.2	N	Magnesium	4620		4680		mg/kg	0.6	RPD<20%
Off-site Soil Area 232	OFS-232-1	OFS-832-1	11-May-10	0	0.2	N	Manganese	423		409		mg/kg	1.7	RPD<20%
Off-site Soil Area 232	OFS-232-1	OFS-832-1	11-May-10	0	0.2	N	Mercury	0.23	J-	0.14	J-	mg/kg	**24.3**	Soil - RPD<20%
Off-site Soil Area 232	OFS-232-1	OFS-832-1	11-May-10	0	0.2	N	Nickel	9.7		10.2		mg/kg	2.5	RPD<20%
Off-site Soil Area 232	OFS-232-1	OFS-832-1	11-May-10	0	0.2	N	Potassium	1310	J+	1520	J+	mg/kg	7.4	RPD<20%
Off-site Soil Area 232	OFS-232-1	OFS-832-1	11-May-10	0	0.2	N	Sodium	201	J	213	J	mg/kg	2.9	RPD<20%
Off-site Soil Area 232	OFS-232-1	OFS-832-1	11-May-10	0	0.2	N	Vanadium	30		30		mg/kg	0.2	RPD<20%
Off-site Soil Area 232	OFS-232-1	OFS-832-1	11-May-10	0	0.2	N	Zinc	98		121		mg/kg	10.5	RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Aluminum	12100		13100		mg/kg	4.0	RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Arsenic	64.2	J	61.1	J	mg/kg	2.5	RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Barium	178		197		mg/kg	5.1	RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Beryllium	0.28	J	0.3	J	mg/kg	3.4	RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Cadmium	5	J	5	J	mg/kg	1.0	RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Calcium	6,030		6,610		mg/kg	4.6	RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Chromium	15.7		16.8		mg/kg	3.4	RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Cobalt	11		12		mg/kg	2.6	RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Copper	162	J	169	J	mg/kg	2.1	RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Cyanide	0.4	J	0.32	J	mg/kg	11.1	RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Iron	19700		21500		mg/kg	4.4	RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Lead	597		469		mg/kg	12.0	RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Magnesium	4990		5450		mg/kg	4.4	RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Manganese	470		494		mg/kg	2.5	RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Mercury	1.8	J-	1.7	J-	mg/kg	2.9	RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Nickel	16		17		mg/kg	4.0	RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Potassium	3150	J+	2740	J+	mg/kg	7.0	RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Selenium	3	J	3	J	mg/kg	1.5	RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Silver	2		2.1		mg/kg	2.4	RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Sodium	522		339	J	mg/kg	**21.3**	Soil - RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Vanadium	32.5		36.2		mg/kg	5.4	RPD<20%
Off-site Soil Area 233	OFS-233-1	OFS-833-1	11-May-10	0	0.2	N	Zinc	1320		1470		mg/kg	5.4	RPD<20%
Off-site Soil Area 234	OFS-234-1	OFS-834-1	11-May-10	0	0.2	N	Aluminum	13200	J	14300	J	mg/kg	4.0	RPD<20%
Off-site Soil Area 234	OFS-234-1	OFS-834-1	11-May-10	0	0.2	N	Arsenic	27	J	32	J	mg/kg	8.6	RPD<20%
Off-site Soil Area 234	OFS-234-1	OFS-834-1	11-May-10	0	0.2	N	Barium	163	J	162	J	mg/kg	0.3	RPD<20%
Off-site Soil Area 234	OFS-234-1	OFS-834-1	11-May-10	0	0.2	N	Beryllium	0.52	J	0.51	J	mg/kg	1.0	RPD<20%
Off-site Soil Area 234	OFS-234-1	OFS-834-1	11-May-10	0	0.2	N	Cadmium	1.3	J	1.2	J	mg/kg	4.0	RPD<20%
Off-site Soil Area 234	OFS-234-1	OFS-834-1	11-May-10	0	0.2	N	Calcium	4,910	J	5,200	J	mg/kg	2.9	RPD<20%
Off-site Soil Area 234	OFS-234-1	OFS-834-1	11-May-10	0	0.2	N	Chromium	20	J	20	J	mg/kg	0.8	RPD<20%
Off-site Soil Area 234	OFS-234-1	OFS-834-1	11-May-10	0	0.2	N	Cobalt	12.7	J	13.6	J	mg/kg	3.4	RPD<20%
Off-site Soil Area 234	OFS-234-1	OFS-834-1	11-May-10	0	0.2	N	Copper	144	J	145	J	mg/kg	0.3	RPD<20%
Off-site Soil Area 234	OFS-234-1	OFS-834-1	11-May-10	0	0.2	N	Cyanide	0.42	J	0.5	J	mg/kg	6.7	RPD<20%
Off-site Soil Area 234	OFS-234-1	OFS-834-1	11-May-10	0	0.2	N	Iron	21300	J	24000	J	mg/kg	6.0	RPD<20%
Off-site Soil Area 234	OFS-234-1	OFS-834-1	11-May-10	0	0.2	N	Lead	99.5371	J	107	J	mg/kg	3.6	RPD<20%
Off-site Soil Area 234	OFS-234-1	OFS-834-1	11-May-10	0	0.2	N	Magnesium	5190	J	5510	J	mg/kg	3.0	RPD<20%
Off-site Soil Area 234	OFS-234-1	OFS-834-1	11-May-10	0	0.2	N	Manganese	850	J	832	J	mg/kg	1.1	RPD<20%
Off-site Soil Area 234	OFS-234-1	OFS-834-1	11-May-10	0	0.2	N	Mercury	0.19		0.22		mg/kg	7.3	RPD<20%
Off-site Soil Area 234	OFS-234-1	OFS-834-1	11-May-10	0	0.2	N	Nickel	21.7	J	22.2	J	mg/kg	1.1	RPD<20%
Off-site Soil Area 234	OFS-234-1	OFS-834-1	11-May-10	0	0.2	N	Potassium	3,820	J	3,980	J	mg/kg	2.1	RPD<20%
Off-site Soil Area 234	OFS-234-1	OFS-834-1	11-May-10	0	0.2	N	Sodium	50.5	J	51.5	J	mg/kg	1.0	RPD<20%
Off-site Soil Area 234	OFS-234-1	OFS-834-1	11-May-10	0	0.2	N	Vanadium	36.9	J	40.5	J	mg/kg	4.7	RPD<20%
Off-site Soil Area 234	OFS-234-1	OFS-834-1	11-May-10	0	0.2	N	Zinc	269.0	J	253	J	mg/kg	3.1	RPD<20%
Off-site Soil Area 235	OFS-235-1	OFS-835-1	11-May-10	0	0.2	N	Aluminum	20300	J	20000	J	mg/kg	0.7	RPD<20%
Off-site Soil Area 235	OFS-235-1	OFS-835-1	11-May-10	0	0.2	N	Arsenic	25.1	J	22.1	J	mg/kg	6.4	RPD<20%
Off-site Soil Area 235	OFS-235-1	OFS-835-1	11-May-10	0	0.2	N	Barium	250	J	253	J	mg/kg	0.6	RPD<20%
Off-site Soil Area 235	OFS-235-1	OFS-835-1	11-May-10	0	0.2	N	Beryllium	1	J	1	J	mg/kg	1.4	RPD<20%
Off-site Soil Area 235	OFS-235-1	OFS-835-1	11-May-10	0	0.2	N	Cadmium	0.51	J	0.54	J	mg/kg	2.9	RPD<20%
Off-site Soil Area 235	OFS-235-1	OFS-835-1	11-May-10	0	0.2	N	Calcium	6340	J	6310.0	J	mg/kg	0.2	RPD<20%
Off-site Soil Area 235	OFS-235-1	OFS-835-1	11-May-10	0	0.2	N	Chromium	27.4	J	26.6	J	mg/kg	1.5	RPD<20%
Off-site Soil Area 235	OFS-235-1	OFS-835-1	11-May-10	0	0.2	N	Cobalt	15.1	J	14.4	J	mg/kg	2.4	RPD<20%
Off-site Soil Area 235	OFS-235-1	OFS-835-1	11-May-10	0	0.2	N	Copper	99.7299	J	107	J	mg/kg	3.5	RPD<20%
Off-site Soil Area 235	OFS-235-1	OFS-835-1	11-May-10	0	0.2	N	Cyanide	0.24	J	0.3	J	mg/kg	11.1	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 235	OFS-235-1	OFS-835-1	11-May-10	0	0.2	N	Iron	25400	J	25700	J	mg/kg	0.6	RPD<20%
Off-site Soil Area 235	OFS-235-1	OFS-835-1	11-May-10	0	0.2	N	Lead	35.5	J	69.8	J	mg/kg	**32.6**	Soil - RPD<20%
Off-site Soil Area 235	OFS-235-1	OFS-835-1	11-May-10	0	0.2	N	Magnesium	6900	J	6540	J	mg/kg	2.7	RPD<20%
Off-site Soil Area 235	OFS-235-1	OFS-835-1	11-May-10	0	0.2	N	Manganese	745	J	704	J	mg/kg	2.8	RPD<20%
Off-site Soil Area 235	OFS-235-1	OFS-835-1	11-May-10	0	0.2	N	Mercury	0		0		mg/kg	**56.5**	Soil - RPD<20%
Off-site Soil Area 235	OFS-235-1	OFS-835-1	11-May-10	0	0.2	N	Nickel	33.4	J	32.2	J	mg/kg	1.8	RPD<20%
Off-site Soil Area 235	OFS-235-1	OFS-835-1	11-May-10	0	0.2	N	Potassium	2940	J	3180	J	mg/kg	3.9	RPD<20%
Off-site Soil Area 235	OFS-235-1	OFS-835-1	11-May-10	0	0.2	N	Sodium	55	J	58	J	mg/kg	2.1	RPD<20%
Off-site Soil Area 235	OFS-235-1	OFS-835-1	11-May-10	0	0.2	N	Vanadium	45	J	44.2	J	mg/kg	0.9	RPD<20%
Off-site Soil Area 235	OFS-235-1	OFS-835-1	11-May-10	0	0.2	N	Zinc	130	J	143	J	mg/kg	4.8	RPD<20%
Off-site Soil Area 236	OFS-236-1	OFS-836-1	11-May-10	0	0.2	N	Aluminum	18900		19900		mg/kg	2.6	RPD<20%
Off-site Soil Area 236	OFS-236-1	OFS-836-1	11-May-10	0	0.2	N	Arsenic	37.8		41.5		mg/kg	4.7	RPD<20%
Off-site Soil Area 236	OFS-236-1	OFS-836-1	11-May-10	0	0.2	N	Barium	255		325		mg/kg	12.1	RPD<20%
Off-site Soil Area 236	OFS-236-1	OFS-836-1	11-May-10	0	0.2	N	Beryllium	0.63		0.66		mg/kg	2.3	RPD<20%
Off-site Soil Area 236	OFS-236-1	OFS-836-1	11-May-10	0	0.2	N	Cadmium	1.5	J	1.4	J	mg/kg	3.4	RPD<20%
Off-site Soil Area 236	OFS-236-1	OFS-836-1	11-May-10	0	0.2	N	Calcium	7,170		7,520		mg/kg	2.4	RPD<20%
Off-site Soil Area 236	OFS-236-1	OFS-836-1	11-May-10	0	0.2	N	Chromium	34		35		mg/kg	1.6	RPD<20%
Off-site Soil Area 236	OFS-236-1	OFS-836-1	11-May-10	0	0.2	N	Cobalt	18		19		mg/kg	2.7	RPD<20%
Off-site Soil Area 236	OFS-236-1	OFS-836-1	11-May-10	0	0.2	N	Copper	202		205		mg/kg	0.7	RPD<20%
Off-site Soil Area 236	OFS-236-1	OFS-836-1	11-May-10	0	0.2	N	Cyanide	0.23	J	0.26	J	mg/kg	6.1	RPD<20%
Off-site Soil Area 236	OFS-236-1	OFS-836-1	11-May-10	0	0.2	N	Iron	28900		31600		mg/kg	4.5	RPD<20%
Off-site Soil Area 236	OFS-236-1	OFS-836-1	11-May-10	0	0.2	N	Lead	150		139		mg/kg	3.8	RPD<20%
Off-site Soil Area 236	OFS-236-1	OFS-836-1	11-May-10	0	0.2	N	Magnesium	7,910		8,000		mg/kg	0.6	RPD<20%
Off-site Soil Area 236	OFS-236-1	OFS-836-1	11-May-10	0	0.2	N	Manganese	1,130		1,380		mg/kg	10.0	RPD<20%
Off-site Soil Area 236	OFS-236-1	OFS-836-1	11-May-10	0	0.2	N	Nickel	35.7		37.3		mg/kg	2.2	RPD<20%
Off-site Soil Area 236	OFS-236-1	OFS-836-1	11-May-10	0	0.2	N	Potassium	4260		4440		mg/kg	2.1	RPD<20%
Off-site Soil Area 236	OFS-236-1	OFS-836-1	11-May-10	0	0.2	N	Sodium	92.9	J	94.6	J	mg/kg	0.9	RPD<20%
Off-site Soil Area 236	OFS-236-1	OFS-836-1	11-May-10	0	0.2	N	Vanadium	57.2		61.1		mg/kg	3.3	RPD<20%
Off-site Soil Area 236	OFS-236-1	OFS-836-1	11-May-10	0	0.2	N	Zinc	371		325		mg/kg	6.6	RPD<20%
Off-site Soil Area 237	OFS-237-1	OFS-837-1	12-May-10	0	0.2	N	Aluminum	13700		13700		mg/kg	0.0	RPD<20%
Off-site Soil Area 237	OFS-237-1	OFS-837-1	12-May-10	0	0.2	N	Arsenic	42.1		42.1		mg/kg	0.0	RPD<20%
Off-site Soil Area 237	OFS-237-1	OFS-837-1	12-May-10	0	0.2	N	Barium	194		304		mg/kg	**22.1**	Soil - RPD<20%
Off-site Soil Area 237	OFS-237-1	OFS-837-1	12-May-10	0	0.2	N	Beryllium	0.56	J	0.54	J	mg/kg	1.8	RPD<20%
Off-site Soil Area 237	OFS-237-1	OFS-837-1	12-May-10	0	0.2	N	Cadmium	0.7	J	0.82	J	mg/kg	7.9	RPD<20%
Off-site Soil Area 237	OFS-237-1	OFS-837-1	12-May-10	0	0.2	N	Calcium	3,070		3,260		mg/kg	3.0	RPD<20%
Off-site Soil Area 237	OFS-237-1	OFS-837-1	12-May-10	0	0.2	N	Chromium	28.1		28.7		mg/kg	1.1	RPD<20%
Off-site Soil Area 237	OFS-237-1	OFS-837-1	12-May-10	0	0.2	N	Cobalt	16.8		16.6		mg/kg	0.6	RPD<20%
Off-site Soil Area 237	OFS-237-1	OFS-837-1	12-May-10	0	0.2	N	Copper	119		117		mg/kg	0.8	RPD<20%
Off-site Soil Area 237	OFS-237-1	OFS-837-1	12-May-10	0	0.2	N	Cyanide	0.62	J	0.7	J	mg/kg	6.1	RPD<20%
Off-site Soil Area 237	OFS-237-1	OFS-837-1	12-May-10	0	0.2	N	Iron	26100		26600		mg/kg	0.9	RPD<20%
Off-site Soil Area 237	OFS-237-1	OFS-837-1	12-May-10	0	0.2	N	Lead	56.2		57.2		mg/kg	0.9	RPD<20%
Off-site Soil Area 237	OFS-237-1	OFS-837-1	12-May-10	0	0.2	N	Magnesium	5,430		5,590		mg/kg	1.5	RPD<20%
Off-site Soil Area 237	OFS-237-1	OFS-837-1	12-May-10	0	0.2	N	Manganese	1,500		2,050		mg/kg	15.5	RPD<20%
Off-site Soil Area 237	OFS-237-1	OFS-837-1	12-May-10	0	0.2	N	Nickel	27		29		mg/kg	2.3	RPD<20%
Off-site Soil Area 237	OFS-237-1	OFS-837-1	12-May-10	0	0.2	N	Potassium	2,910		2,970		mg/kg	1.0	RPD<20%
Off-site Soil Area 237	OFS-237-1	OFS-837-1	12-May-10	0	0.2	N	Thallium	0.49	J	0.58	J	mg/kg	8.4	RPD<20%
Off-site Soil Area 237	OFS-237-1	OFS-837-1	12-May-10	0	0.2	N	Vanadium	53.2		52.1		mg/kg	1.0	RPD<20%
Off-site Soil Area 237	OFS-237-1	OFS-837-1	12-May-10	0	0.2	N	Zinc	120		127		mg/kg	2.8	RPD<20%
Off-site Soil Area 238	OFS-238-1	OFS-838-1	11-May-10	0	0.2	N	Aluminum	13600		14400		mg/kg	2.9	RPD<20%
Off-site Soil Area 238	OFS-238-1	OFS-838-1	11-May-10	0	0.2	N	Antimony	1.2	J	1.2	J	mg/kg	0.0	RPD<20%
Off-site Soil Area 238	OFS-238-1	OFS-838-1	11-May-10	0	0.2	N	Arsenic	17.1		19.1		mg/kg	5.5	RPD<20%
Off-site Soil Area 238	OFS-238-1	OFS-838-1	11-May-10	0	0.2	N	Barium	281		291		mg/kg	1.7	RPD<20%
Off-site Soil Area 238	OFS-238-1	OFS-838-1	11-May-10	0	0.2	N	Beryllium	0.66		0.69		mg/kg	2.2	RPD<20%
Off-site Soil Area 238	OFS-238-1	OFS-838-1	11-May-10	0	0.2	N	Cadmium	1.2		1.3		mg/kg	4.0	RPD<20%
Off-site Soil Area 238	OFS-238-1	OFS-838-1	11-May-10	0	0.2	N	Calcium	21,700		15,700		mg/kg	16.0	RPD<20%
Off-site Soil Area 238	OFS-238-1	OFS-838-1	11-May-10	0	0.2	N	Chromium	17.6		20		mg/kg	6.4	RPD<20%
Off-site Soil Area 238	OFS-238-1	OFS-838-1	11-May-10	0	0.2	N	Cobalt	11.4		13.1		mg/kg	6.9	RPD<20%
Off-site Soil Area 238	OFS-238-1	OFS-838-1	11-May-10	0	0.2	N	Copper	70		71		mg/kg	1.1	RPD<20%
Off-site Soil Area 238	OFS-238-1	OFS-838-1	11-May-10	0	0.2	N	Iron	19,700		21,300		mg/kg	3.9	RPD<20%
Off-site Soil Area 238	OFS-238-1	OFS-838-1	11-May-10	0	0.2	N	Lead	43.6		48.9		mg/kg	5.7	RPD<20%
Off-site Soil Area 238	OFS-238-1	OFS-838-1	11-May-10	0	0.2	N	Magnesium	6190		6600		mg/kg	3.2	RPD<20%
Off-site Soil Area 238	OFS-238-1	OFS-838-1	11-May-10	0	0.2	N	Manganese	764	J	773	J	mg/kg	0.6	RPD<20%
Off-site Soil Area 238	OFS-238-1	OFS-838-1	11-May-10	0	0.2	N	Mercury	0.042	J	0.068	J	mg/kg	**23.6**	Soil - RPD<20%
Off-site Soil Area 238	OFS-238-1	OFS-838-1	11-May-10	0	0.2	N	Nickel	27		29		mg/kg	4.7	RPD<20%
Off-site Soil Area 238	OFS-238-1	OFS-838-1	11-May-10	0	0.2	N	Potassium	2230	J+	2260	J+	mg/kg	0.7	RPD<20%
Off-site Soil Area 238	OFS-238-1	OFS-838-1	11-May-10	0	0.2	N	Vanadium	40.9		42.8		mg/kg	2.3	RPD<20%
Off-site Soil Area 238	OFS-238-1	OFS-838-1	11-May-10	0	0.2	N	Zinc	103		111		mg/kg	3.7	RPD<20%
Off-site Soil Area 239	OFS-239-1	OFS-839-1	11-May-10	0	0.2	N	Aluminum	5990		8960		mg/kg	19.9	RPD<20%
Off-site Soil Area 239	OFS-239-1	OFS-839-1	11-May-10	0	0.2	N	Antimony	0.9	J	0.94	J	mg/kg	2.7	RPD<20%
Off-site Soil Area 239	OFS-239-1	OFS-839-1	11-May-10	0	0.2	N	Arsenic	5.6		11.5		mg/kg	**34.5**	Soil - RPD<20%
Off-site Soil Area 239	OFS-239-1	OFS-839-1	11-May-10	0	0.2	N	Barium	84.5		136		mg/kg	**23.4**	Soil - RPD<20%
Off-site Soil Area 239	OFS-239-1	OFS-839-1	11-May-10	0	0.2	N	Cadmium	0.54		0.81		mg/kg	20.0	RPD<20%
Off-site Soil Area 239	OFS-239-1	OFS-839-1	11-May-10	0	0.2	N	Calcium	10700		7600		mg/kg	16.9	RPD<20%
Off-site Soil Area 239	OFS-239-1	OFS-839-1	11-May-10	0	0.2	N	Chromium	9.7		15.3		mg/kg	**22.4**	Soil - RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 239	OFS-239-1	OFS-839-1	11-May-10	0	0.2	N	Cobalt	5.2		7.8		mg/kg	20.0	RPD<20%
Off-site Soil Area 239	OFS-239-1	OFS-839-1	11-May-10	0	0.2	N	Copper	29.2		48.6		mg/kg	**24.9**	Soil - RPD<20%
Off-site Soil Area 239	OFS-239-1	OFS-839-1	11-May-10	0	0.2	N	Iron	9730		14400		mg/kg	19.4	RPD<20%
Off-site Soil Area 239	OFS-239-1	OFS-839-1	11-May-10	0	0.2	N	Lead	10.4		19		mg/kg	**29.3**	Soil - RPD<20%
Off-site Soil Area 239	OFS-239-1	OFS-839-1	11-May-10	0	0.2	N	Magnesium	3410		4730		mg/kg	16.2	RPD<20%
Off-site Soil Area 239	OFS-239-1	OFS-839-1	11-May-10	0	0.2	N	Manganese	317	J	694	J	mg/kg	**37.3**	Soil - RPD<20%
Off-site Soil Area 239	OFS-239-1	OFS-839-1	11-May-10	0	0.2	N	Nickel	11		18		mg/kg	**23.3**	Soil - RPD<20%
Off-site Soil Area 239	OFS-239-1	OFS-839-1	11-May-10	0	0.2	N	Potassium	1670	J+	2440	J+	mg/kg	18.7	RPD<20%
Off-site Soil Area 239	OFS-239-1	OFS-839-1	11-May-10	0	0.2	N	Vanadium	22.2		31.5		mg/kg	17.3	RPD<20%
Off-site Soil Area 239	OFS-239-1	OFS-839-1	11-May-10	0	0.2	N	Zinc	47.4		81.5		mg/kg	**26.5**	Soil - RPD<20%
Off-site Soil Area 240	OFS-240-1	OFS-840-1	11-May-10	0	0.2	N	Aluminum	15,700		14,500		mg/kg	4.0	RPD<20%
Off-site Soil Area 240	OFS-240-1	OFS-840-1	11-May-10	0	0.2	N	Arsenic	25.9	J	30.8	J	mg/kg	8.6	RPD<20%
Off-site Soil Area 240	OFS-240-1	OFS-840-1	11-May-10	0	0.2	N	Barium	261		255		mg/kg	1.2	RPD<20%
Off-site Soil Area 240	OFS-240-1	OFS-840-1	11-May-10	0	0.2	N	Beryllium	1		1		mg/kg	0.7	RPD<20%
Off-site Soil Area 240	OFS-240-1	OFS-840-1	11-May-10	0	0.2	N	Cadmium	3		3		mg/kg	1.8	RPD<20%
Off-site Soil Area 240	OFS-240-1	OFS-840-1	11-May-10	0	0.2	N	Calcium	5710		5410		mg/kg	2.7	RPD<20%
Off-site Soil Area 240	OFS-240-1	OFS-840-1	11-May-10	0	0.2	N	Chromium	27.5		25.4		mg/kg	4.0	RPD<20%
Off-site Soil Area 240	OFS-240-1	OFS-840-1	11-May-10	0	0.2	N	Cobalt	16.8		15.9		mg/kg	2.8	RPD<20%
Off-site Soil Area 240	OFS-240-1	OFS-840-1	11-May-10	0	0.2	N	Copper	229		245		mg/kg	3.4	RPD<20%
Off-site Soil Area 240	OFS-240-1	OFS-840-1	11-May-10	0	0.2	N	Cyanide	0	J	0	J	mg/kg	14.3	RPD<20%
Off-site Soil Area 240	OFS-240-1	OFS-840-1	11-May-10	0	0.2	N	Iron	26,300		25,800		mg/kg	1.0	RPD<20%
Off-site Soil Area 240	OFS-240-1	OFS-840-1	11-May-10	0	0.2	N	Lead	45		59		mg/kg	13.3	RPD<20%
Off-site Soil Area 240	OFS-240-1	OFS-840-1	11-May-10	0	0.2	N	Magnesium	7,330		6,630		mg/kg	5.0	RPD<20%
Off-site Soil Area 240	OFS-240-1	OFS-840-1	11-May-10	0	0.2	N	Manganese	1610		1590		mg/kg	0.6	RPD<20%
Off-site Soil Area 240	OFS-240-1	OFS-840-1	11-May-10	0	0.2	N	Mercury	0.086	J	0.12		mg/kg	16.5	RPD<20%
Off-site Soil Area 240	OFS-240-1	OFS-840-1	11-May-10	0	0.2	N	Nickel	35.2		31.8		mg/kg	5.1	RPD<20%
Off-site Soil Area 240	OFS-240-1	OFS-840-1	11-May-10	0	0.2	N	Potassium	4390	J+	3910	J+	mg/kg	5.8	RPD<20%
Off-site Soil Area 240	OFS-240-1	OFS-840-1	11-May-10	0	0.2	N	Silver	0	J	0	J	mg/kg	**46.3**	Soil - RPD<20%
Off-site Soil Area 240	OFS-240-1	OFS-840-1	11-May-10	0	0.2	N	Sodium	78.9	J	70.9	J	mg/kg	5.3	RPD<20%
Off-site Soil Area 240	OFS-240-1	OFS-840-1	11-May-10	0	0.2	N	Vanadium	52.5		49.6		mg/kg	2.8	RPD<20%
Off-site Soil Area 240	OFS-240-1	OFS-840-1	11-May-10	0	0.2	N	Zinc	238		261		mg/kg	4.6	RPD<20%
Off-site Soil Area 241	OFS-241-1	OFS-841-1	12-May-10	0	0.2	N	Aluminum	12800		14800.0		mg/kg	7.2	RPD<20%
Off-site Soil Area 241	OFS-241-1	OFS-841-1	12-May-10	0	0.2	N	Arsenic	21		22		mg/kg	1.6	RPD<20%
Off-site Soil Area 241	OFS-241-1	OFS-841-1	12-May-10	0	0.2	N	Barium	140		156		mg/kg	5.4	RPD<20%
Off-site Soil Area 241	OFS-241-1	OFS-841-1	12-May-10	0	0.2	N	Beryllium	0.4	J	0.48	J	mg/kg	9.1	RPD<20%
Off-site Soil Area 241	OFS-241-1	OFS-841-1	12-May-10	0	0.2	N	Cadmium	0	J	0	J	mg/kg	1.9	RPD<20%
Off-site Soil Area 241	OFS-241-1	OFS-841-1	12-May-10	0	0.2	N	Calcium	5030		5780		mg/kg	6.9	RPD<20%
Off-site Soil Area 241	OFS-241-1	OFS-841-1	12-May-10	0	0.2	N	Chromium	13.8		15.3		mg/kg	5.2	RPD<20%
Off-site Soil Area 241	OFS-241-1	OFS-841-1	12-May-10	0	0.2	N	Cobalt	10.4		11.6		mg/kg	5.5	RPD<20%
Off-site Soil Area 241	OFS-241-1	OFS-841-1	12-May-10	0	0.2	N	Copper	32.1		38.7		mg/kg	9.3	RPD<20%
Off-site Soil Area 241	OFS-241-1	OFS-841-1	12-May-10	0	0.2	N	Iron	17700		20700		mg/kg	7.8	RPD<20%
Off-site Soil Area 241	OFS-241-1	OFS-841-1	12-May-10	0	0.2	N	Lead	22.1		22.8		mg/kg	1.6	RPD<20%
Off-site Soil Area 241	OFS-241-1	OFS-841-1	12-May-10	0	0.2	N	Magnesium	5,260		6,160		mg/kg	7.9	RPD<20%
Off-site Soil Area 241	OFS-241-1	OFS-841-1	12-May-10	0	0.2	N	Manganese	482		499		mg/kg	1.7	RPD<20%
Off-site Soil Area 241	OFS-241-1	OFS-841-1	12-May-10	0	0.2	N	Mercury	0	J	0	J	mg/kg	12.9	RPD<20%
Off-site Soil Area 241	OFS-241-1	OFS-841-1	12-May-10	0	0.2	N	Nickel	14.2		15.9		mg/kg	5.6	RPD<20%
Off-site Soil Area 241	OFS-241-1	OFS-841-1	12-May-10	0	0.2	N	Potassium	2,540		2,970		mg/kg	7.8	RPD<20%
Off-site Soil Area 241	OFS-241-1	OFS-841-1	12-May-10	0	0.2	N	Sodium	59.7	J	58.7	J	mg/kg	0.8	RPD<20%
Off-site Soil Area 241	OFS-241-1	OFS-841-1	12-May-10	0	0.2	N	Vanadium	31.7		39.5		mg/kg	11.0	RPD<20%
Off-site Soil Area 241	OFS-241-1	OFS-841-1	12-May-10	0	0.2	N	Zinc	114		121		mg/kg	3.0	RPD<20%
Off-site Soil Area 242	OFS-242-1	OFS-842-1	12-May-10	0	0.2	N	Aluminum	14400		15900		mg/kg	5.0	RPD<20%
Off-site Soil Area 242	OFS-242-1	OFS-842-1	12-May-10	0	0.2	N	Antimony	0	J	0	J	mg/kg	14.3	RPD<20%
Off-site Soil Area 242	OFS-242-1	OFS-842-1	12-May-10	0	0.2	N	Arsenic	40.5		47.8		mg/kg	8.3	RPD<20%
Off-site Soil Area 242	OFS-242-1	OFS-842-1	12-May-10	0	0.2	N	Barium	168		194		mg/kg	7.2	RPD<20%
Off-site Soil Area 242	OFS-242-1	OFS-842-1	12-May-10	0	0.2	N	Beryllium	0.4	J	0.43	J	mg/kg	3.6	RPD<20%
Off-site Soil Area 242	OFS-242-1	OFS-842-1	12-May-10	0	0.2	N	Calcium	4020		4160		mg/kg	1.7	RPD<20%
Off-site Soil Area 242	OFS-242-1	OFS-842-1	12-May-10	0	0.2	N	Chromium	32.3		34.1		mg/kg	2.7	RPD<20%
Off-site Soil Area 242	OFS-242-1	OFS-842-1	12-May-10	0	0.2	N	Cobalt	16.9		19.2		mg/kg	6.4	RPD<20%
Off-site Soil Area 242	OFS-242-1	OFS-842-1	12-May-10	0	0.2	N	Copper	53.6		66.7		mg/kg	10.9	RPD<20%
Off-site Soil Area 242	OFS-242-1	OFS-842-1	12-May-10	0	0.2	N	Cyanide	0	J	0	J	mg/kg	5.9	RPD<20%
Off-site Soil Area 242	OFS-242-1	OFS-842-1	12-May-10	0	0.2	N	Iron	29800		32100		mg/kg	3.7	RPD<20%
Off-site Soil Area 242	OFS-242-1	OFS-842-1	12-May-10	0	0.2	N	Lead	23		28		mg/kg	8.9	RPD<20%
Off-site Soil Area 242	OFS-242-1	OFS-842-1	12-May-10	0	0.2	N	Magnesium	7570		8550		mg/kg	6.1	RPD<20%
Off-site Soil Area 242	OFS-242-1	OFS-842-1	12-May-10	0	0.2	N	Manganese	863		977		mg/kg	6.2	RPD<20%
Off-site Soil Area 242	OFS-242-1	OFS-842-1	12-May-10	0	0.2	N	Nickel	38.6		39.9		mg/kg	1.7	RPD<20%
Off-site Soil Area 242	OFS-242-1	OFS-842-1	12-May-10	0	0.2	N	Potassium	2850		3200		mg/kg	5.8	RPD<20%
Off-site Soil Area 242	OFS-242-1	OFS-842-1	12-May-10	0	0.2	N	Thallium	0.36	J	0.33	J	mg/kg	4.3	RPD<20%
Off-site Soil Area 242	OFS-242-1	OFS-842-1	12-May-10	0	0.2	N	Vanadium	59.9		70.5		mg/kg	8.1	RPD<20%
Off-site Soil Area 242	OFS-242-1	OFS-842-1	12-May-10	0	0.2	N	Zinc	109		115		mg/kg	2.7	RPD<20%
Off-site Soil Area 243	OFS-243-1	OFS-843-1	12-May-10	0	0.2	N	Aluminum	23,400	J	23,000	J	mg/kg	0.9	RPD<20%
Off-site Soil Area 243	OFS-243-1	OFS-843-1	12-May-10	0	0.2	N	Arsenic	25.3	J+	25.1	J+	mg/kg	0.4	RPD<20%
Off-site Soil Area 243	OFS-243-1	OFS-843-1	12-May-10	0	0.2	N	Barium	283	J	289	J	mg/kg	1.0	RPD<20%
Off-site Soil Area 243	OFS-243-1	OFS-843-1	12-May-10	0	0.2	N	Beryllium	0.74	J	0.78	J	mg/kg	2.6	RPD<20%
Off-site Soil Area 243	OFS-243-1	OFS-843-1	12-May-10	0	0.2	N	Calcium	21600	J	23400	J	mg/kg	4.0	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 243	OFS-243-1	OFS-843-1	12-May-10	0	0.2	N	Chromium	38.6		36.8		mg/kg	2.4	RPD<20%
Off-site Soil Area 243	OFS-243-1	OFS-843-1	12-May-10	0	0.2	N	Cobalt	18.5		19.2		mg/kg	1.9	RPD<20%
Off-site Soil Area 243	OFS-243-1	OFS-843-1	12-May-10	0	0.2	N	Copper	63.2	J	61.8	J	mg/kg	1.1	RPD<20%
Off-site Soil Area 243	OFS-243-1	OFS-843-1	12-May-10	0	0.2	N	Cyanide	0.23	J	0.25	J	mg/kg	4.2	RPD<20%
Off-site Soil Area 243	OFS-243-1	OFS-843-1	12-May-10	0	0.2	N	Iron	29,700	J	30,300	J	mg/kg	1.0	RPD<20%
Off-site Soil Area 243	OFS-243-1	OFS-843-1	12-May-10	0	0.2	N	Lead	29		30		mg/kg	1.2	RPD<20%
Off-site Soil Area 243	OFS-243-1	OFS-843-1	12-May-10	0	0.2	N	Magnesium	11100	J	11100	J	mg/kg	0.0	RPD<20%
Off-site Soil Area 243	OFS-243-1	OFS-843-1	12-May-10	0	0.2	N	Manganese	1,010	J	1,010	J	mg/kg	0.0	RPD<20%
Off-site Soil Area 243	OFS-243-1	OFS-843-1	12-May-10	0	0.2	N	Mercury	0.22		0.093	J	mg/kg	**40.6**	Soil - RPD<20%
Off-site Soil Area 243	OFS-243-1	OFS-843-1	12-May-10	0	0.2	N	Nickel	44.5	J	45.1	J	mg/kg	0.7	RPD<20%
Off-site Soil Area 243	OFS-243-1	OFS-843-1	12-May-10	0	0.2	N	Potassium	3890	J	3800	J	mg/kg	1.2	RPD<20%
Off-site Soil Area 243	OFS-243-1	OFS-843-1	12-May-10	0	0.2	N	Vanadium	57.6	J	57.9	J	mg/kg	0.3	RPD<20%
Off-site Soil Area 243	OFS-243-1	OFS-843-1	12-May-10	0	0.2	N	Zinc	149		155		mg/kg	2.0	RPD<20%
Off-site Soil Area 244	OFS-244-1	OFS-844-1	12-May-10	0	0.2	N	Aluminum	18400	J	16500	J	mg/kg	5.4	RPD<20%
Off-site Soil Area 244	OFS-244-1	OFS-844-1	12-May-10	0	0.2	N	Arsenic	20.4	J+	15.3	J+	mg/kg	14.3	RPD<20%
Off-site Soil Area 244	OFS-244-1	OFS-844-1	12-May-10	0	0.2	N	Barium	180	J	177	J	mg/kg	0.8	RPD<20%
Off-site Soil Area 244	OFS-244-1	OFS-844-1	12-May-10	0	0.2	N	Beryllium	0.59	J	0.58	J	mg/kg	0.9	RPD<20%
Off-site Soil Area 244	OFS-244-1	OFS-844-1	12-May-10	0	0.2	N	Calcium	9110	J	9420	J	mg/kg	1.7	RPD<20%
Off-site Soil Area 244	OFS-244-1	OFS-844-1	12-May-10	0	0.2	N	Chromium	23		18.9		mg/kg	9.8	RPD<20%
Off-site Soil Area 244	OFS-244-1	OFS-844-1	12-May-10	0	0.2	N	Cobalt	19.1		12.5		mg/kg	**20.9**	Soil - RPD<20%
Off-site Soil Area 244	OFS-244-1	OFS-844-1	12-May-10	0	0.2	N	Copper	52.9	J	37.2	J	mg/kg	17.4	RPD<20%
Off-site Soil Area 244	OFS-244-1	OFS-844-1	12-May-10	0	0.2	N	Iron	25000	J	21600	J	mg/kg	7.3	RPD<20%
Off-site Soil Area 244	OFS-244-1	OFS-844-1	12-May-10	0	0.2	N	Lead	22.4		15.3		mg/kg	18.8	RPD<20%
Off-site Soil Area 244	OFS-244-1	OFS-844-1	12-May-10	0	0.2	N	Magnesium	7680	J	6820	J	mg/kg	5.9	RPD<20%
Off-site Soil Area 244	OFS-244-1	OFS-844-1	12-May-10	0	0.2	N	Manganese	661	J	572	J	mg/kg	7.2	RPD<20%
Off-site Soil Area 244	OFS-244-1	OFS-844-1	12-May-10	0	0.2	N	Mercury	0.054	J	0.059	J	mg/kg	4.4	RPD<20%
Off-site Soil Area 244	OFS-244-1	OFS-844-1	12-May-10	0	0.2	N	Nickel	23	J	18	J	mg/kg	11.3	RPD<20%
Off-site Soil Area 244	OFS-244-1	OFS-844-1	12-May-10	0	0.2	N	Potassium	1950	J	2000	J	mg/kg	1.3	RPD<20%
Off-site Soil Area 244	OFS-244-1	OFS-844-1	12-May-10	0	0.2	N	Vanadium	51	J	39	J	mg/kg	12.8	RPD<20%
Off-site Soil Area 244	OFS-244-1	OFS-844-1	12-May-10	0	0.2	N	Zinc	75		74.9		mg/kg	0.1	RPD<20%
Off-site Soil Area 245	OFS-245-1	OFS-845-1	12-May-10	0	0.2	N	Aluminum	15500		16100		mg/kg	1.9	RPD<20%
Off-site Soil Area 245	OFS-245-1	OFS-845-1	12-May-10	0	0.2	N	Arsenic	13.1		13.6		mg/kg	1.9	RPD<20%
Off-site Soil Area 245	OFS-245-1	OFS-845-1	12-May-10	0	0.2	N	Barium	135		139		mg/kg	1.5	RPD<20%
Off-site Soil Area 245	OFS-245-1	OFS-845-1	12-May-10	0	0.2	N	Cadmium	0.51		0.49	J	mg/kg	2.0	RPD<20%
Off-site Soil Area 245	OFS-245-1	OFS-845-1	12-May-10	0	0.2	N	Calcium	6210		6380		mg/kg	1.4	RPD<20%
Off-site Soil Area 245	OFS-245-1	OFS-845-1	12-May-10	0	0.2	N	Chromium	13.9		13.4		mg/kg	1.8	RPD<20%
Off-site Soil Area 245	OFS-245-1	OFS-845-1	12-May-10	0	0.2	N	Cobalt	12.8		14		mg/kg	4.5	RPD<20%
Off-site Soil Area 245	OFS-245-1	OFS-845-1	12-May-10	0	0.2	N	Copper	27.9		27.5		mg/kg	0.7	RPD<20%
Off-site Soil Area 245	OFS-245-1	OFS-845-1	12-May-10	0	0.2	N	Iron	22900		23200		mg/kg	0.7	RPD<20%
Off-site Soil Area 245	OFS-245-1	OFS-845-1	12-May-10	0	0.2	N	Lead	9.1		9		mg/kg	0.6	RPD<20%
Off-site Soil Area 245	OFS-245-1	OFS-845-1	12-May-10	0	0.2	N	Magnesium	7,170		7,410		mg/kg	1.6	RPD<20%
Off-site Soil Area 245	OFS-245-1	OFS-845-1	12-May-10	0	0.2	N	Manganese	570		619		mg/kg	4.1	RPD<20%
Off-site Soil Area 245	OFS-245-1	OFS-845-1	12-May-10	0	0.2	N	Nickel	19.6		19.2		mg/kg	1.0	RPD<20%
Off-site Soil Area 245	OFS-245-1	OFS-845-1	12-May-10	0	0.2	N	Potassium	1320		1240		mg/kg	3.1	RPD<20%
Off-site Soil Area 245	OFS-245-1	OFS-845-1	12-May-10	0	0.2	N	Selenium	1.8	J	2	J	mg/kg	5.3	RPD<20%
Off-site Soil Area 245	OFS-245-1	OFS-845-1	12-May-10	0	0.2	N	Sodium	102	J	85.6	J	mg/kg	8.7	RPD<20%
Off-site Soil Area 245	OFS-245-1	OFS-845-1	12-May-10	0	0.2	N	Vanadium	42	J	43	J	mg/kg	0.8	RPD<20%
Off-site Soil Area 245	OFS-245-1	OFS-845-1	12-May-10	0	0.2	N	Zinc	63.7		61.9		mg/kg	1.4	RPD<20%
Off-site Soil Area 246	OFS-246-1	OFS-846-1	12-May-10	0	0.2	N	Aluminum	15200		14100		mg/kg	3.8	RPD<20%
Off-site Soil Area 246	OFS-246-1	OFS-846-1	12-May-10	0	0.2	N	Arsenic	48		45		mg/kg	4.0	RPD<20%
Off-site Soil Area 246	OFS-246-1	OFS-846-1	12-May-10	0	0.2	N	Barium	220		194		mg/kg	6.3	RPD<20%
Off-site Soil Area 246	OFS-246-1	OFS-846-1	12-May-10	0	0.2	N	Beryllium	0.072	J	0.06	J	mg/kg	9.1	RPD<20%
Off-site Soil Area 246	OFS-246-1	OFS-846-1	12-May-10	0	0.2	N	Cadmium	2		2		mg/kg	0.0	RPD<20%
Off-site Soil Area 246	OFS-246-1	OFS-846-1	12-May-10	0	0.2	N	Calcium	13,400		12,300		mg/kg	4.3	RPD<20%
Off-site Soil Area 246	OFS-246-1	OFS-846-1	12-May-10	0	0.2	N	Chromium	27.1		25.2		mg/kg	3.6	RPD<20%
Off-site Soil Area 246	OFS-246-1	OFS-846-1	12-May-10	0	0.2	N	Cobalt	13.6		13.3		mg/kg	1.1	RPD<20%
Off-site Soil Area 246	OFS-246-1	OFS-846-1	12-May-10	0	0.2	N	Copper	118		123		mg/kg	2.1	RPD<20%
Off-site Soil Area 246	OFS-246-1	OFS-846-1	12-May-10	0	0.2	N	Cyanide	0.55	J	0.68	J	mg/kg	10.6	RPD<20%
Off-site Soil Area 246	OFS-246-1	OFS-846-1	12-May-10	0	0.2	N	Iron	20900		19400		mg/kg	3.7	RPD<20%
Off-site Soil Area 246	OFS-246-1	OFS-846-1	12-May-10	0	0.2	N	Lead	111		113		mg/kg	0.9	RPD<20%
Off-site Soil Area 246	OFS-246-1	OFS-846-1	12-May-10	0	0.2	N	Magnesium	6660		6050		mg/kg	4.8	RPD<20%
Off-site Soil Area 246	OFS-246-1	OFS-846-1	12-May-10	0	0.2	N	Manganese	700		623		mg/kg	5.8	RPD<20%
Off-site Soil Area 246	OFS-246-1	OFS-846-1	12-May-10	0	0.2	N	Mercury	0.23		0.18		mg/kg	12.2	RPD<20%
Off-site Soil Area 246	OFS-246-1	OFS-846-1	12-May-10	0	0.2	N	Nickel	29.2		25.8		mg/kg	6.2	RPD<20%
Off-site Soil Area 246	OFS-246-1	OFS-846-1	12-May-10	0	0.2	N	Potassium	3470		3410		mg/kg	0.9	RPD<20%
Off-site Soil Area 246	OFS-246-1	OFS-846-1	12-May-10	0	0.2	N	Selenium	2.3	J	2.2	J	mg/kg	2.2	RPD<20%
Off-site Soil Area 246	OFS-246-1	OFS-846-1	12-May-10	0	0.2	N	Sodium	153	J	149	J	mg/kg	1.3	RPD<20%
Off-site Soil Area 246	OFS-246-1	OFS-846-1	12-May-10	0	0.2	N	Vanadium	39.9	J	37.3	J	mg/kg	3.4	RPD<20%
Off-site Soil Area 246	OFS-246-1	OFS-846-1	12-May-10	0	0.2	N	Zinc	571		543		mg/kg	2.5	RPD<20%
Off-site Soil Area 247	OFS-247-1	OFS-847-1	12-May-10	0	0.2	N	Aluminum	15300		17100		mg/kg	5.6	RPD<20%
Off-site Soil Area 247	OFS-247-1	OFS-847-1	12-May-10	0	0.2	N	Arsenic	66		61		mg/kg	4.4	RPD<20%
Off-site Soil Area 247	OFS-247-1	OFS-847-1	12-May-10	0	0.2	N	Barium	151		165		mg/kg	4.4	RPD<20%
Off-site Soil Area 247	OFS-247-1	OFS-847-1	12-May-10	0	0.2	N	Beryllium	0.19	J	0.21	J	mg/kg	5.0	RPD<20%
Off-site Soil Area 247	OFS-247-1	OFS-847-1	12-May-10	0	0.2	N	Cadmium	2.3		2.1		mg/kg	4.5	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 247	OFS-247-1	OFS-847-1	12-May-10	0	0.2	N	Calcium	9810		10300		mg/kg	2.4	RPD<20%
Off-site Soil Area 247	OFS-247-1	OFS-847-1	12-May-10	0	0.2	N	Chromium	23		25		mg/kg	3.6	RPD<20%
Off-site Soil Area 247	OFS-247-1	OFS-847-1	12-May-10	0	0.2	N	Cobalt	14.1		14.8		mg/kg	2.4	RPD<20%
Off-site Soil Area 247	OFS-247-1	OFS-847-1	12-May-10	0	0.2	N	Copper	86.8		82.6		mg/kg	2.5	RPD<20%
Off-site Soil Area 247	OFS-247-1	OFS-847-1	12-May-10	0	0.2	N	Iron	22,500		23,900		mg/kg	3.0	RPD<20%
Off-site Soil Area 247	OFS-247-1	OFS-847-1	12-May-10	0	0.2	N	Lead	92.2		73.2		mg/kg	11.5	RPD<20%
Off-site Soil Area 247	OFS-247-1	OFS-847-1	12-May-10	0	0.2	N	Magnesium	6550		7050		mg/kg	3.7	RPD<20%
Off-site Soil Area 247	OFS-247-1	OFS-847-1	12-May-10	0	0.2	N	Manganese	546		571		mg/kg	2.2	RPD<20%
Off-site Soil Area 247	OFS-247-1	OFS-847-1	12-May-10	0	0.2	N	Mercury	0.12		0.16		mg/kg	14.3	RPD<20%
Off-site Soil Area 247	OFS-247-1	OFS-847-1	12-May-10	0	0.2	N	Nickel	22		24		mg/kg	3.3	RPD<20%
Off-site Soil Area 247	OFS-247-1	OFS-847-1	12-May-10	0	0.2	N	Potassium	2280		2440		mg/kg	3.4	RPD<20%
Off-site Soil Area 247	OFS-247-1	OFS-847-1	12-May-10	0	0.2	N	Selenium	2	J	2	J	mg/kg	2.2	RPD<20%
Off-site Soil Area 247	OFS-247-1	OFS-847-1	12-May-10	0	0.2	N	Sodium	72.2	J	75.4	J	mg/kg	2.2	RPD<20%
Off-site Soil Area 247	OFS-247-1	OFS-847-1	12-May-10	0	0.2	N	Vanadium	37.1		40.2		mg/kg	4.0	RPD<20%
Off-site Soil Area 247	OFS-247-1	OFS-847-1	12-May-10	0	0.2	N	Zinc	534		501		mg/kg	3.2	RPD<20%
Off-site Soil Area 248	OFS-248-1	OFS-848-1	12-May-10	0	0.2	N	Aluminum	16800		17400		mg/kg	1.8	RPD<20%
Off-site Soil Area 248	OFS-248-1	OFS-848-1	12-May-10	0	0.2	N	Arsenic	27.4		25.3		mg/kg	4.0	RPD<20%
Off-site Soil Area 248	OFS-248-1	OFS-848-1	12-May-10	0	0.2	N	Barium	254		335		mg/kg	13.8	RPD<20%
Off-site Soil Area 248	OFS-248-1	OFS-848-1	12-May-10	0	0.2	N	Beryllium	0.32	J	0.3	J	mg/kg	3.2	RPD<20%
Off-site Soil Area 248	OFS-248-1	OFS-848-1	12-May-10	0	0.2	N	Cadmium	0.98		1.1		mg/kg	5.8	RPD<20%
Off-site Soil Area 248	OFS-248-1	OFS-848-1	12-May-10	0	0.2	N	Calcium	8560		8740		mg/kg	1.0	RPD<20%
Off-site Soil Area 248	OFS-248-1	OFS-848-1	12-May-10	0	0.2	N	Chromium	24.7		26.5		mg/kg	3.5	RPD<20%
Off-site Soil Area 248	OFS-248-1	OFS-848-1	12-May-10	0	0.2	N	Cobalt	14.9		15.8		mg/kg	2.9	RPD<20%
Off-site Soil Area 248	OFS-248-1	OFS-848-1	12-May-10	0	0.2	N	Copper	77.8		93.3		mg/kg	9.1	RPD<20%
Off-site Soil Area 248	OFS-248-1	OFS-848-1	12-May-10	0	0.2	N	Iron	23900		24000		mg/kg	0.2	RPD<20%
Off-site Soil Area 248	OFS-248-1	OFS-848-1	12-May-10	0	0.2	N	Lead	42.200		33.4		mg/kg	11.6	RPD<20%
Off-site Soil Area 248	OFS-248-1	OFS-848-1	12-May-10	0	0.2	N	Magnesium	7110		7220		mg/kg	0.8	RPD<20%
Off-site Soil Area 248	OFS-248-1	OFS-848-1	12-May-10	0	0.2	N	Manganese	1,240		1,680		mg/kg	15.1	RPD<20%
Off-site Soil Area 248	OFS-248-1	OFS-848-1	12-May-10	0	0.2	N	Nickel	32.9		34.7		mg/kg	2.7	RPD<20%
Off-site Soil Area 248	OFS-248-1	OFS-848-1	12-May-10	0	0.2	N	Potassium	2720		2850		mg/kg	2.3	RPD<20%
Off-site Soil Area 248	OFS-248-1	OFS-848-1	12-May-10	0	0.2	N	Selenium	2.1	J	1.9	J	mg/kg	5.0	RPD<20%
Off-site Soil Area 248	OFS-248-1	OFS-848-1	12-May-10	0	0.2	N	Sodium	65	J	67	J	mg/kg	1.3	RPD<20%
Off-site Soil Area 248	OFS-248-1	OFS-848-1	12-May-10	0	0.2	N	Vanadium	43		42.8		mg/kg	0.2	RPD<20%
Off-site Soil Area 248	OFS-248-1	OFS-848-1	12-May-10	0	0.2	N	Zinc	111		120		mg/kg	3.9	RPD<20%
Off-site Soil Area 249	OFS-249-1	OFS-849-1	12-May-10	0	0.2	N	Aluminum	16,700		18,000		mg/kg	3.7	RPD<20%
Off-site Soil Area 249	OFS-249-1	OFS-849-1	12-May-10	0	0.2	N	Arsenic	11	J	10	J	mg/kg	1.9	RPD<20%
Off-site Soil Area 249	OFS-249-1	OFS-849-1	12-May-10	0	0.2	N	Barium	479	J	273.0	J	mg/kg	**27.4**	Soil - RPD<20%
Off-site Soil Area 249	OFS-249-1	OFS-849-1	12-May-10	0	0.2	N	Beryllium	0.68	J	0.72	J	mg/kg	2.9	RPD<20%
Off-site Soil Area 249	OFS-249-1	OFS-849-1	12-May-10	0	0.2	N	Calcium	22800	J	10400	J	mg/kg	**37.3**	Soil - RPD<20%
Off-site Soil Area 249	OFS-249-1	OFS-849-1	12-May-10	0	0.2	N	Chromium	19		19.9		mg/kg	2.3	RPD<20%
Off-site Soil Area 249	OFS-249-1	OFS-849-1	12-May-10	0	0.2	N	Cobalt	12		12		mg/kg	0.9	RPD<20%
Off-site Soil Area 249	OFS-249-1	OFS-849-1	12-May-10	0	0.2	N	Copper	22.9		23.4		mg/kg	1.1	RPD<20%
Off-site Soil Area 249	OFS-249-1	OFS-849-1	12-May-10	0	0.2	N	Iron	20600		22000		mg/kg	3.3	RPD<20%
Off-site Soil Area 249	OFS-249-1	OFS-849-1	12-May-10	0	0.2	N	Lead	10.2		10.5		mg/kg	1.4	RPD<20%
Off-site Soil Area 249	OFS-249-1	OFS-849-1	12-May-10	0	0.2	N	Magnesium	6070		6530		mg/kg	3.7	RPD<20%
Off-site Soil Area 249	OFS-249-1	OFS-849-1	12-May-10	0	0.2	N	Manganese	527		495		mg/kg	3.1	RPD<20%
Off-site Soil Area 249	OFS-249-1	OFS-849-1	12-May-10	0	0.2	N	Nickel	18.5		18.2		mg/kg	0.8	RPD<20%
Off-site Soil Area 249	OFS-249-1	OFS-849-1	12-May-10	0	0.2	N	Potassium	1840		2030		mg/kg	4.9	RPD<20%
Off-site Soil Area 249	OFS-249-1	OFS-849-1	12-May-10	0	0.2	N	Sodium	388	J	490	J	mg/kg	11.6	RPD<20%
Off-site Soil Area 249	OFS-249-1	OFS-849-1	12-May-10	0	0.2	N	Vanadium	37.8		38.8		mg/kg	1.3	RPD<20%
Off-site Soil Area 249	OFS-249-1	OFS-849-1	12-May-10	0	0.2	N	Zinc	50.3		52.9		mg/kg	2.5	RPD<20%
Off-site Soil Area 250	OFS-250-1	OFS-850-1	12-May-10	0	0.2	N	Aluminum	9650		11900		mg/kg	10.4	RPD<20%
Off-site Soil Area 250	OFS-250-1	OFS-850-1	12-May-10	0	0.2	N	Arsenic	16.7	J	19.9		mg/kg	8.7	RPD<20%
Off-site Soil Area 250	OFS-250-1	OFS-850-1	12-May-10	0	0.2	N	Barium	142	J	105		mg/kg	15.0	RPD<20%
Off-site Soil Area 250	OFS-250-1	OFS-850-1	12-May-10	0	0.2	N	Beryllium	0.34	J	0.31	J	mg/kg	4.6	RPD<20%
Off-site Soil Area 250	OFS-250-1	OFS-850-1	12-May-10	0	0.2	N	Calcium	8290	J	10500		mg/kg	11.8	RPD<20%
Off-site Soil Area 250	OFS-250-1	OFS-850-1	12-May-10	0	0.2	N	Chromium	12.2		13.8		mg/kg	6.2	RPD<20%
Off-site Soil Area 250	OFS-250-1	OFS-850-1	12-May-10	0	0.2	N	Cobalt	13.1		13.2		mg/kg	0.4	RPD<20%
Off-site Soil Area 250	OFS-250-1	OFS-850-1	12-May-10	0	0.2	N	Copper	27.6		31.3		mg/kg	6.3	RPD<20%
Off-site Soil Area 250	OFS-250-1	OFS-850-1	12-May-10	0	0.2	N	Iron	19200		21900		mg/kg	6.6	RPD<20%
Off-site Soil Area 250	OFS-250-1	OFS-850-1	12-May-10	0	0.2	N	Lead	22.3		18.8	J	mg/kg	8.5	RPD<20%
Off-site Soil Area 250	OFS-250-1	OFS-850-1	12-May-10	0	0.2	N	Magnesium	4520		4710		mg/kg	2.1	RPD<20%
Off-site Soil Area 250	OFS-250-1	OFS-850-1	12-May-10	0	0.2	N	Manganese	522		534		mg/kg	1.1	RPD<20%
Off-site Soil Area 250	OFS-250-1	OFS-850-1	12-May-10	0	0.2	N	Nickel	14		14.5		mg/kg	1.8	RPD<20%
Off-site Soil Area 250	OFS-250-1	OFS-850-1	12-May-10	0	0.2	N	Potassium	1970		2090		mg/kg	3.0	RPD<20%
Off-site Soil Area 250	OFS-250-1	OFS-850-1	12-May-10	0	0.2	N	Vanadium	35.4		42.6		mg/kg	9.2	RPD<20%
Off-site Soil Area 250	OFS-250-1	OFS-850-1	12-May-10	0	0.2	N	Zinc	71.6		77.5		mg/kg	4.0	RPD<20%
Off-site Soil Area 251	OFS-251-1	OFS-851-1	12-May-10	0	0.2	N	Aluminum	18500		17700		mg/kg	2.2	RPD<20%
Off-site Soil Area 251	OFS-251-1	OFS-851-1	12-May-10	0	0.2	N	Arsenic	14.4		13.1		mg/kg	4.7	RPD<20%
Off-site Soil Area 251	OFS-251-1	OFS-851-1	12-May-10	0	0.2	N	Barium	220		209		mg/kg	2.6	RPD<20%
Off-site Soil Area 251	OFS-251-1	OFS-851-1	12-May-10	0	0.2	N	Beryllium	0.54	J	0.54	J	mg/kg	0.0	RPD<20%
Off-site Soil Area 251	OFS-251-1	OFS-851-1	12-May-10	0	0.2	N	Calcium	9,960		11,700		mg/kg	8.0	RPD<20%
Off-site Soil Area 251	OFS-251-1	OFS-851-1	12-May-10	0	0.2	N	Chromium	20.5		20.6		mg/kg	0.2	RPD<20%
Off-site Soil Area 251	OFS-251-1	OFS-851-1	12-May-10	0	0.2	N	Cobalt	13.6		12.3		mg/kg	5.0	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 251	OFS-251-1	OFS-851-1	12-May-10	0	0.2	N	Copper	29.3		26.9		mg/kg	4.3	RPD<20%
Off-site Soil Area 251	OFS-251-1	OFS-851-1	12-May-10	0	0.2	N	Iron	23300		21800		mg/kg	3.3	RPD<20%
Off-site Soil Area 251	OFS-251-1	OFS-851-1	12-May-10	0	0.2	N	Lead	10	J	10	J	mg/kg	1.5	RPD<20%
Off-site Soil Area 251	OFS-251-1	OFS-851-1	12-May-10	0	0.2	N	Magnesium	7490		7360		mg/kg	0.9	RPD<20%
Off-site Soil Area 251	OFS-251-1	OFS-851-1	12-May-10	0	0.2	N	Manganese	658		571		mg/kg	7.1	RPD<20%
Off-site Soil Area 251	OFS-251-1	OFS-851-1	12-May-10	0	0.2	N	Nickel	20.7		20.7		mg/kg	0.0	RPD<20%
Off-site Soil Area 251	OFS-251-1	OFS-851-1	12-May-10	0	0.2	N	Potassium	1950		1740		mg/kg	5.7	RPD<20%
Off-site Soil Area 251	OFS-251-1	OFS-851-1	12-May-10	0	0.2	N	Vanadium	41.1		40.9		mg/kg	0.2	RPD<20%
Off-site Soil Area 251	OFS-251-1	OFS-851-1	12-May-10	0	0.2	N	Zinc	56.6		58.2		mg/kg	1.4	RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Aluminum	17500		17300		mg/kg	0.6	RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Antimony	0.38	J	0.56	J	mg/kg	19.1	RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Arsenic	44		40.9		mg/kg	3.7	RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Barium	234		237		mg/kg	0.6	RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Beryllium	1		1		mg/kg	1.0	RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Cadmium	1.6	J	1.5	J	mg/kg	3.2	RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Calcium	6910		6750		mg/kg	1.2	RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Chromium	35.7		34.3		mg/kg	2.0	RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Cobalt	20.6		19.6		mg/kg	2.5	RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Copper	113		94.4		mg/kg	9.0	RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Cyanide	0	J	0	J	mg/kg	2.0	RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Iron	25300		25000		mg/kg	0.6	RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Lead	110		94.8		mg/kg	7.4	RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Magnesium	6280		5700		mg/kg	4.8	RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Manganese	838		814		mg/kg	1.5	RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Mercury	0.56		0.54		mg/kg	1.8	RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Nickel	58.9		54.5		mg/kg	3.9	RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Potassium	2,330		2,290		mg/kg	0.9	RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Silver	0.34	J	0.2	J	mg/kg	**25.9**	Soil - RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Sodium	95	J	150	J	mg/kg	**22.4**	Soil - RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Vanadium	51.9		51.2		mg/kg	0.7	RPD<20%
Off-site Soil Area 252	OFS-252-1	OFS-852-1	12-May-10	0	0.2	N	Zinc	386	J	358	J	mg/kg	3.8	RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Aluminum	13500		14400		mg/kg	3.2	RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Antimony	0.59	J	0.43	J	mg/kg	15.7	RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Arsenic	46.1		36.4		mg/kg	11.8	RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Barium	167		151		mg/kg	5.0	RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Beryllium	0.4	J	0.39	J	mg/kg	1.3	RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Cadmium	0.63	J	0.48	J	mg/kg	13.5	RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Calcium	3520		4440		mg/kg	11.6	RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Chromium	33		30		mg/kg	4.5	RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Cobalt	15.3		15.2		mg/kg	0.3	RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Copper	89.6		73.5		mg/kg	9.9	RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Cyanide	0	J	0	J	mg/kg	13.9	RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Iron	26,500		23,700		mg/kg	5.6	RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Lead	40.4		26.7		mg/kg	**20.4**	Soil - RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Magnesium	5320		5590		mg/kg	2.5	RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Manganese	1050		905		mg/kg	7.4	RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Mercury	0	J	2		mg/kg	**93**	Soil - RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Nickel	30.1		32.7		mg/kg	4.1	RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Potassium	2,200		2,120		mg/kg	1.9	RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Sodium	53.2	J	77.9	J	mg/kg	18.8	RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Thallium	0.24	J	0.2	J	mg/kg	9.1	RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Vanadium	52		49		mg/kg	2.8	RPD<20%
Off-site Soil Area 253	OFS-253-1	OFS-853-1	12-May-10	0	0.2	N	Zinc	108	J	96.1	J	mg/kg	5.8	RPD<20%
Off-site Soil Area 254	OFS-254-1	OFS-854-1	13-May-10	0	0.2	N	Aluminum	20600		21100.0		mg/kg	1.2	RPD<20%
Off-site Soil Area 254	OFS-254-1	OFS-854-1	13-May-10	0	0.2	N	Antimony	0.34	J	0.19	J	mg/kg	**28.3**	Soil - RPD<20%
Off-site Soil Area 254	OFS-254-1	OFS-854-1	13-May-10	0	0.2	N	Arsenic	38.6		39.7		mg/kg	1.4	RPD<20%
Off-site Soil Area 254	OFS-254-1	OFS-854-1	13-May-10	0	0.2	N	Barium	165		174		mg/kg	2.7	RPD<20%
Off-site Soil Area 254	OFS-254-1	OFS-854-1	13-May-10	0	0.2	N	Beryllium	0.38	J	0.4	J	mg/kg	2.6	RPD<20%
Off-site Soil Area 254	OFS-254-1	OFS-854-1	13-May-10	0	0.2	N	Calcium	8020		8470		mg/kg	2.7	RPD<20%
Off-site Soil Area 254	OFS-254-1	OFS-854-1	13-May-10	0	0.2	N	Chromium	15.2		16.1		mg/kg	2.9	RPD<20%
Off-site Soil Area 254	OFS-254-1	OFS-854-1	13-May-10	0	0.2	N	Cobalt	15.2		16		mg/kg	2.6	RPD<20%
Off-site Soil Area 254	OFS-254-1	OFS-854-1	13-May-10	0	0.2	N	Copper	46.4		46.4		mg/kg	0.0	RPD<20%
Off-site Soil Area 254	OFS-254-1	OFS-854-1	13-May-10	0	0.2	N	Cyanide	0.41	J	0.36	J	mg/kg	6.5	RPD<20%
Off-site Soil Area 254	OFS-254-1	OFS-854-1	13-May-10	0	0.2	N	Iron	30700		32500		mg/kg	2.8	RPD<20%
Off-site Soil Area 254	OFS-254-1	OFS-854-1	13-May-10	0	0.2	N	Lead	32.3		34.9		mg/kg	3.9	RPD<20%
Off-site Soil Area 254	OFS-254-1	OFS-854-1	13-May-10	0	0.2	N	Magnesium	7500		7890		mg/kg	2.5	RPD<20%
Off-site Soil Area 254	OFS-254-1	OFS-854-1	13-May-10	0	0.2	N	Manganese	769		853		mg/kg	5.2	RPD<20%
Off-site Soil Area 254	OFS-254-1	OFS-854-1	13-May-10	0	0.2	N	Mercury	0.16		0.11		mg/kg	18.5	RPD<20%
Off-site Soil Area 254	OFS-254-1	OFS-854-1	13-May-10	0	0.2	N	Nickel	15		16		mg/kg	2.9	RPD<20%
Off-site Soil Area 254	OFS-254-1	OFS-854-1	13-May-10	0	0.2	N	Potassium	2860		2950		mg/kg	1.5	RPD<20%
Off-site Soil Area 254	OFS-254-1	OFS-854-1	13-May-10	0	0.2	N	Sodium	58.2	J	63.5	J	mg/kg	4.4	RPD<20%
Off-site Soil Area 254	OFS-254-1	OFS-854-1	13-May-10	0	0.2	N	Vanadium	60.9		63.9		mg/kg	2.4	RPD<20%
Off-site Soil Area 254	OFS-254-1	OFS-854-1	13-May-10	0	0.2	N	Zinc	148		155		mg/kg	2.3	RPD<20%
Off-site Soil Area 255	OFS-255-1	OFS-855-1	13-May-10	0	0.2	N	Aluminum	14100		14500		mg/kg	1.4	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 255	OFS-255-1	OFS-855-1	13-May-10	0	0.2	N	Arsenic	32		32		mg/kg	0.5	RPD<20%
Off-site Soil Area 255	OFS-255-1	OFS-855-1	13-May-10	0	0.2	N	Barium	149		147		mg/kg	0.7	RPD<20%
Off-site Soil Area 255	OFS-255-1	OFS-855-1	13-May-10	0	0.2	N	Beryllium	0.38	J	0.4	J	mg/kg	2.6	RPD<20%
Off-site Soil Area 255	OFS-255-1	OFS-855-1	13-May-10	0	0.2	N	Calcium	5580		5380		mg/kg	1.8	RPD<20%
Off-site Soil Area 255	OFS-255-1	OFS-855-1	13-May-10	0	0.2	N	Chromium	34.6	J	35.5	J	mg/kg	1.3	RPD<20%
Off-site Soil Area 255	OFS-255-1	OFS-855-1	13-May-10	0	0.2	N	Cobalt	14.6		14.5		mg/kg	0.3	RPD<20%
Off-site Soil Area 255	OFS-255-1	OFS-855-1	13-May-10	0	0.2	N	Copper	55.4		53.5		mg/kg	1.7	RPD<20%
Off-site Soil Area 255	OFS-255-1	OFS-855-1	13-May-10	0	0.2	N	Cyanide	0.23	J	0.29	J	mg/kg	11.5	RPD<20%
Off-site Soil Area 255	OFS-255-1	OFS-855-1	13-May-10	0	0.2	N	Iron	23700		23300		mg/kg	0.9	RPD<20%
Off-site Soil Area 255	OFS-255-1	OFS-855-1	13-May-10	0	0.2	N	Lead	24.4		23.2		mg/kg	2.5	RPD<20%
Off-site Soil Area 255	OFS-255-1	OFS-855-1	13-May-10	0	0.2	N	Magnesium	6,180		6,080		mg/kg	0.8	RPD<20%
Off-site Soil Area 255	OFS-255-1	OFS-855-1	13-May-10	0	0.2	N	Manganese	785		753		mg/kg	2.1	RPD<20%
Off-site Soil Area 255	OFS-255-1	OFS-855-1	13-May-10	0	0.2	N	Nickel	27.2		27.5		mg/kg	0.5	RPD<20%
Off-site Soil Area 255	OFS-255-1	OFS-855-1	13-May-10	0	0.2	N	Potassium	4130		4130		mg/kg	0.0	RPD<20%
Off-site Soil Area 255	OFS-255-1	OFS-855-1	13-May-10	0	0.2	N	Thallium	0.22	J	0.16	J	mg/kg	15.8	RPD<20%
Off-site Soil Area 255	OFS-255-1	OFS-855-1	13-May-10	0	0.2	N	Vanadium	41.7		41.5		mg/kg	0.2	RPD<20%
Off-site Soil Area 255	OFS-255-1	OFS-855-1	13-May-10	0	0.2	N	Zinc	109		102		mg/kg	3.3	RPD<20%
Off-site Soil Area 256	OFS-256-1	OFS-856-1	13-May-10	0	0.2	N	Aluminum	22,900		22,000		mg/kg	2.0	RPD<20%
Off-site Soil Area 256	OFS-256-1	OFS-856-1	13-May-10	0	0.2	N	Arsenic	27.1		27		mg/kg	0.2	RPD<20%
Off-site Soil Area 256	OFS-256-1	OFS-856-1	13-May-10	0	0.2	N	Barium	414		331		mg/kg	11.1	RPD<20%
Off-site Soil Area 256	OFS-256-1	OFS-856-1	13-May-10	0	0.2	N	Beryllium	0.75		0.73		mg/kg	1.4	RPD<20%
Off-site Soil Area 256	OFS-256-1	OFS-856-1	13-May-10	0	0.2	N	Cadmium	0.58	J	0.53	J	mg/kg	4.5	RPD<20%
Off-site Soil Area 256	OFS-256-1	OFS-856-1	13-May-10	0	0.2	N	Calcium	5770		6160		mg/kg	3.3	RPD<20%
Off-site Soil Area 256	OFS-256-1	OFS-856-1	13-May-10	0	0.2	N	Chromium	34.5	J	32.8	J	mg/kg	2.5	RPD<20%
Off-site Soil Area 256	OFS-256-1	OFS-856-1	13-May-10	0	0.2	N	Cobalt	19		18		mg/kg	1.9	RPD<20%
Off-site Soil Area 256	OFS-256-1	OFS-856-1	13-May-10	0	0.2	N	Copper	107		119		mg/kg	5.3	RPD<20%
Off-site Soil Area 256	OFS-256-1	OFS-856-1	13-May-10	0	0.2	N	Cyanide	0.25	J	0.23	J	mg/kg	4.2	RPD<20%
Off-site Soil Area 256	OFS-256-1	OFS-856-1	13-May-10	0	0.2	N	Iron	30,100		30,600		mg/kg	0.8	RPD<20%
Off-site Soil Area 256	OFS-256-1	OFS-856-1	13-May-10	0	0.2	N	Lead	24		32		mg/kg	15.7	RPD<20%
Off-site Soil Area 256	OFS-256-1	OFS-856-1	13-May-10	0	0.2	N	Magnesium	8620		8930		mg/kg	1.8	RPD<20%
Off-site Soil Area 256	OFS-256-1	OFS-856-1	13-May-10	0	0.2	N	Manganese	2710		2340		mg/kg	7.3	RPD<20%
Off-site Soil Area 256	OFS-256-1	OFS-856-1	13-May-10	0	0.2	N	Nickel	43		43		mg/kg	0.8	RPD<20%
Off-site Soil Area 256	OFS-256-1	OFS-856-1	13-May-10	0	0.2	N	Potassium	2360		2460		mg/kg	2.1	RPD<20%
Off-site Soil Area 256	OFS-256-1	OFS-856-1	13-May-10	0	0.2	N	Thallium	0.84	J	0.7	J	mg/kg	9.1	RPD<20%
Off-site Soil Area 256	OFS-256-1	OFS-856-1	13-May-10	0	0.2	N	Vanadium	60.3		59.1		mg/kg	1.0	RPD<20%
Off-site Soil Area 256	OFS-256-1	OFS-856-1	13-May-10	0	0.2	N	Zinc	104		114		mg/kg	4.6	RPD<20%
Off-site Soil Area 257	OFS-257-1	OFS-857-1	13-May-10	0	0.2	N	Aluminum	12500		12400		mg/kg	0.4	RPD<20%
Off-site Soil Area 257	OFS-257-1	OFS-857-1	13-May-10	0	0.2	N	Arsenic	26		25		mg/kg	2.0	RPD<20%
Off-site Soil Area 257	OFS-257-1	OFS-857-1	13-May-10	0	0.2	N	Barium	109		112		mg/kg	1.4	RPD<20%
Off-site Soil Area 257	OFS-257-1	OFS-857-1	13-May-10	0	0.2	N	Cadmium	1.5		1.6		mg/kg	3.2	RPD<20%
Off-site Soil Area 257	OFS-257-1	OFS-857-1	13-May-10	0	0.2	N	Calcium	5020		5550		mg/kg	5.0	RPD<20%
Off-site Soil Area 257	OFS-257-1	OFS-857-1	13-May-10	0	0.2	N	Chromium	17		17		mg/kg	0.9	RPD<20%
Off-site Soil Area 257	OFS-257-1	OFS-857-1	13-May-10	0	0.2	N	Cobalt	9.9		10.3		mg/kg	2.0	RPD<20%
Off-site Soil Area 257	OFS-257-1	OFS-857-1	13-May-10	0	0.2	N	Copper	101		106		mg/kg	2.4	RPD<20%
Off-site Soil Area 257	OFS-257-1	OFS-857-1	13-May-10	0	0.2	N	Cyanide	0.45	J	0.45	J	mg/kg	0.0	RPD<20%
Off-site Soil Area 257	OFS-257-1	OFS-857-1	13-May-10	0	0.2	N	Iron	19400		18900		mg/kg	1.3	RPD<20%
Off-site Soil Area 257	OFS-257-1	OFS-857-1	13-May-10	0	0.2	N	Lead	54.0		53.4		mg/kg	0.6	RPD<20%
Off-site Soil Area 257	OFS-257-1	OFS-857-1	13-May-10	0	0.2	N	Magnesium	4,680		4,640		mg/kg	0.4	RPD<20%
Off-site Soil Area 257	OFS-257-1	OFS-857-1	13-May-10	0	0.2	N	Manganese	446		441		mg/kg	0.6	RPD<20%
Off-site Soil Area 257	OFS-257-1	OFS-857-1	13-May-10	0	0.2	N	Mercury	0.081	J	0.045	J	mg/kg	**28.6**	Soil - RPD<20%
Off-site Soil Area 257	OFS-257-1	OFS-857-1	13-May-10	0	0.2	N	Nickel	15.2		15.2		mg/kg	0.0	RPD<20%
Off-site Soil Area 257	OFS-257-1	OFS-857-1	13-May-10	0	0.2	N	Potassium	2500		2400		mg/kg	2.0	RPD<20%
Off-site Soil Area 257	OFS-257-1	OFS-857-1	13-May-10	0	0.2	N	Selenium	2.1	J	2.4	J	mg/kg	6.7	RPD<20%
Off-site Soil Area 257	OFS-257-1	OFS-857-1	13-May-10	0	0.2	N	Silver	0.63	J	0.55	J	mg/kg	6.8	RPD<20%
Off-site Soil Area 257	OFS-257-1	OFS-857-1	13-May-10	0	0.2	N	Sodium	110	J	109	J	mg/kg	0.5	RPD<20%
Off-site Soil Area 257	OFS-257-1	OFS-857-1	13-May-10	0	0.2	N	Vanadium	36.6		36.4		mg/kg	0.3	RPD<20%
Off-site Soil Area 257	OFS-257-1	OFS-857-1	13-May-10	0	0.2	N	Zinc	206		200		mg/kg	1.5	RPD<20%
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Aluminum	14,800		14,800		mg/kg	0.0	RPD<20%
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Arsenic	34.6		32.2		mg/kg	3.6	RPD<20%
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Barium	181		149		mg/kg	9.7	RPD<20%
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Beryllium	0.17	J	0.16	J	mg/kg	3.0	RPD<20%
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Cadmium	2		2		mg/kg	2.2	RPD<20%
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Calcium	7110		6460		mg/kg	4.8	RPD<20%
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Chromium	22.7		22.4		mg/kg	0.7	RPD<20%
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Cobalt	13.6		11.6		mg/kg	7.9	RPD<20%
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Copper	185		193		mg/kg	2.1	RPD<20%
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Cyanide	0.7	J	0.58	J	mg/kg	9.4	RPD<20%
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Iron	22,100		21,200		mg/kg	2.1	RPD<20%
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Lead	122		125		mg/kg	1.2	RPD<20%
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Magnesium	5,390		5,390		mg/kg	0.0	RPD<20%
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Manganese	880		582		mg/kg	**20.4**	Soil - RPD<20%
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Mercury	0.28		0.39		mg/kg	16.4	RPD<20%
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Nickel	21		20		mg/kg	3.5	RPD<20%
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Potassium	4270		4280		mg/kg	0.1	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Selenium	2.6	J	2.7	J	mg/kg	1.9	RPD<20%
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Silver	0.96	J	1		mg/kg	2.0	RPD<20%
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Sodium	114	J	127	J	mg/kg	5.4	RPD<20%
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Vanadium	39		37.4		mg/kg	2.1	RPD<20%
Off-site Soil Area 258	OFS-258-1	OFS-858-1	13-May-10	0	0.2	N	Zinc	409		387		mg/kg	2.8	RPD<20%
Off-site Soil Area 259	OFS-259-1	OFS-859-1	13-May-10	0	0.2	N	Aluminum	16000		15100		mg/kg	2.9	RPD<20%
Off-site Soil Area 259	OFS-259-1	OFS-859-1	13-May-10	0	0.2	N	Antimony	3.8	J	0.21	J	mg/kg	**89.5**	Soil - RPD<20%
Off-site Soil Area 259	OFS-259-1	OFS-859-1	13-May-10	0	0.2	N	Arsenic	22.3		19		mg/kg	8.0	RPD<20%
Off-site Soil Area 259	OFS-259-1	OFS-859-1	13-May-10	0	0.2	N	Barium	179		156		mg/kg	6.9	RPD<20%
Off-site Soil Area 259	OFS-259-1	OFS-859-1	13-May-10	0	0.2	N	Beryllium	0.44	J	0.39	J	mg/kg	6.0	RPD<20%
Off-site Soil Area 259	OFS-259-1	OFS-859-1	13-May-10	0	0.2	N	Cadmium	0.48	J	0.47	J	mg/kg	1.1	RPD<20%
Off-site Soil Area 259	OFS-259-1	OFS-859-1	13-May-10	0	0.2	N	Calcium	9,730	J	9,520	J	mg/kg	1.1	RPD<20%
Off-site Soil Area 259	OFS-259-1	OFS-859-1	13-May-10	0	0.2	N	Chromium	25		23		mg/kg	5.2	RPD<20%
Off-site Soil Area 259	OFS-259-1	OFS-859-1	13-May-10	0	0.2	N	Cobalt	12		12		mg/kg	2.1	RPD<20%
Off-site Soil Area 259	OFS-259-1	OFS-859-1	13-May-10	0	0.2	N	Copper	121	J	112	J	mg/kg	3.9	RPD<20%
Off-site Soil Area 259	OFS-259-1	OFS-859-1	13-May-10	0	0.2	N	Cyanide	0.3	J	0.29	J	mg/kg	1.7	RPD<20%
Off-site Soil Area 259	OFS-259-1	OFS-859-1	13-May-10	0	0.2	N	Iron	22800		22100		mg/kg	1.6	RPD<20%
Off-site Soil Area 259	OFS-259-1	OFS-859-1	13-May-10	0	0.2	N	Lead	22.7		18.8		mg/kg	9.4	RPD<20%
Off-site Soil Area 259	OFS-259-1	OFS-859-1	13-May-10	0	0.2	N	Magnesium	6560	J	6720	J	mg/kg	1.2	RPD<20%
Off-site Soil Area 259	OFS-259-1	OFS-859-1	13-May-10	0	0.2	N	Manganese	873		751		mg/kg	7.5	RPD<20%
Off-site Soil Area 259	OFS-259-1	OFS-859-1	13-May-10	0	0.2	N	Nickel	29		28		mg/kg	1.4	RPD<20%
Off-site Soil Area 259	OFS-259-1	OFS-859-1	13-May-10	0	0.2	N	Potassium	1890		1810		mg/kg	2.2	RPD<20%
Off-site Soil Area 259	OFS-259-1	OFS-859-1	13-May-10	0	0.2	N	Silver	0.048	J	0.038	J	mg/kg	11.6	RPD<20%
Off-site Soil Area 259	OFS-259-1	OFS-859-1	13-May-10	0	0.2	N	Sodium	97	J	118	J	mg/kg	9.6	RPD<20%
Off-site Soil Area 259	OFS-259-1	OFS-859-1	13-May-10	0	0.2	N	Vanadium	45.4		43.6		mg/kg	2.0	RPD<20%
Off-site Soil Area 259	OFS-259-1	OFS-859-1	13-May-10	0	0.2	N	Zinc	107		102		mg/kg	2.4	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Aluminum	19500		17400		mg/kg	5.7	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Antimony	1.5	J	1.6	J	mg/kg	3.2	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Arsenic	127		109		mg/kg	7.6	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Barium	279		233		mg/kg	9.0	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Beryllium	1		0	J	mg/kg	7.5	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Cadmium	11.9	J	8.8	J	mg/kg	15.0	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Calcium	12400	J	17800	J	mg/kg	17.9	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Chromium	24.5		22.2		mg/kg	4.9	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Cobalt	17.6		17.1		mg/kg	1.4	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Copper	956	J	802	J	mg/kg	8.8	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Iron	27,500		25,200		mg/kg	4.4	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Lead	547		437		mg/kg	11.2	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Magnesium	7450	J	6960	J	mg/kg	3.4	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Manganese	662		620		mg/kg	3.3	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Mercury	5		3		mg/kg	**22.1**	Soil - RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Nickel	34.1		31.5		mg/kg	4.0	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Potassium	2550		2230		mg/kg	6.7	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Selenium	4	J	3.2	J	mg/kg	11.1	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Silver	4.1		3.4		mg/kg	9.3	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Sodium	109	J	107	J	mg/kg	0.9	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Thallium	0.35	J	0.26	J	mg/kg	14.8	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Vanadium	43		39		mg/kg	3.9	RPD<20%
Off-site Soil Area 260	OFS-260-1	OFS-860-1	13-May-10	0	0.2	N	Zinc	3330		2440		mg/kg	15.4	RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Aluminum	15,900		16,000		mg/kg	0.3	RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Antimony	0.5	J	0.45	J	mg/kg	5.3	RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Arsenic	46.9		46.9		mg/kg	0.0	RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Barium	179	J	181	J	mg/kg	0.6	RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Beryllium	0.49	J	0.46	J	mg/kg	3.2	RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Cadmium	1.1	J	1.7	J	mg/kg	**21.4**	Soil - RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Calcium	7560		7100		mg/kg	3.1	RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Chromium	42.2		40.7		mg/kg	1.8	RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Cobalt	15.6		15.9		mg/kg	1.0	RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Copper	99.8839		102		mg/kg	1.0	RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Cyanide	0.36	J	0.3	J	mg/kg	9.1	RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Iron	31200		30700		mg/kg	0.8	RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Lead	45.8		49.2		mg/kg	3.6	RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Magnesium	7620		8040		mg/kg	2.7	RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Manganese	1080		1860		mg/kg	**26.5**	Soil - RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Mercury	0.066	J	0.079	J	mg/kg	9.0	RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Nickel	39		48.3		mg/kg	10.7	RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Potassium	3,780		3,730		mg/kg	0.7	RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Silver	0.12	J	0.2	J	mg/kg	**25.0**	Soil - RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Sodium	39.7	J	44.6	J	mg/kg	5.8	RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Thallium	0.44	J	0.61	J	mg/kg	16.2	RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Vanadium	74.5		68.4		mg/kg	4.3	RPD<20%
Off-site Soil Area 261	OFS-261-1	OFS-861-1	13-May-10	0	0.2	N	Zinc	153		153		mg/kg	0.0	RPD<20%
Off-site Soil Area 262	OFS-262-1	OFS-862-1	13-May-10	0	0.2	N	Aluminum	13400		14000		mg/kg	2.2	RPD<20%
Off-site Soil Area 262	OFS-262-1	OFS-862-1	13-May-10	0	0.2	N	Antimony	0.62	J	0.61	J	mg/kg	0.8	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

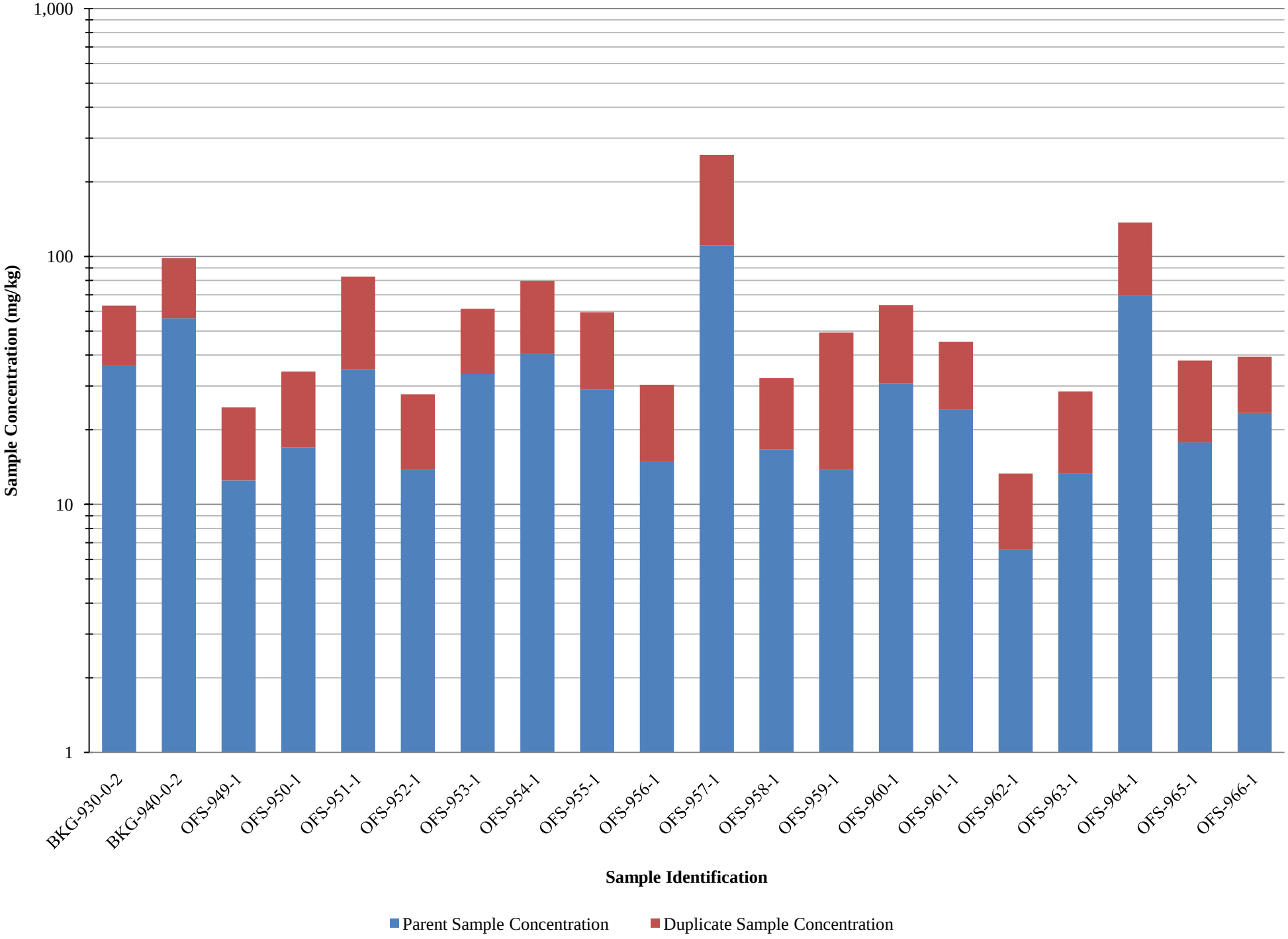
Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 262	OFS-262-1	OFS-862-1	13-May-10	0	0.2	N	Arsenic	32.3		44.7		mg/kg	16.1	RPD<20%
Off-site Soil Area 262	OFS-262-1	OFS-862-1	13-May-10	0	0.2	N	Barium	142	J	149		mg/kg	2.4	RPD<20%
Off-site Soil Area 262	OFS-262-1	OFS-862-1	13-May-10	0	0.2	N	Beryllium	0.31	J	0.36	J	mg/kg	7.5	RPD<20%
Off-site Soil Area 262	OFS-262-1	OFS-862-1	13-May-10	0	0.2	N	Cadmium	1.5	J	1.5	J	mg/kg	0.0	RPD<20%
Off-site Soil Area 262	OFS-262-1	OFS-862-1	13-May-10	0	0.2	N	Calcium	5520		5610		mg/kg	0.8	RPD<20%
Off-site Soil Area 262	OFS-262-1	OFS-862-1	13-May-10	0	0.2	N	Chromium	21		21		mg/kg	0.2	RPD<20%
Off-site Soil Area 262	OFS-262-1	OFS-862-1	13-May-10	0	0.2	N	Cobalt	13		14		mg/kg	3.1	RPD<20%
Off-site Soil Area 262	OFS-262-1	OFS-862-1	13-May-10	0	0.2	N	Copper	929		112		mg/kg	**78.5**	Soil - RPD<20%
Off-site Soil Area 262	OFS-262-1	OFS-862-1	13-May-10	0	0.2	N	Cyanide	0.28	J	0.64	J	mg/kg	**39.1**	Soil - RPD<20%
Off-site Soil Area 262	OFS-262-1	OFS-862-1	13-May-10	0	0.2	N	Iron	23,800		26,300		mg/kg	5.0	RPD<20%
Off-site Soil Area 262	OFS-262-1	OFS-862-1	13-May-10	0	0.2	N	Lead	305		250		mg/kg	9.9	RPD<20%
Off-site Soil Area 262	OFS-262-1	OFS-862-1	13-May-10	0	0.2	N	Magnesium	5,820		5,990		mg/kg	1.4	RPD<20%
Off-site Soil Area 262	OFS-262-1	OFS-862-1	13-May-10	0	0.2	N	Manganese	617		630		mg/kg	1.0	RPD<20%
Off-site Soil Area 262	OFS-262-1	OFS-862-1	13-May-10	0	0.2	N	Mercury	0		0		mg/kg	3.1	RPD<20%
Off-site Soil Area 262	OFS-262-1	OFS-862-1	13-May-10	0	0.2	N	Nickel	16.4		17.7		mg/kg	3.8	RPD<20%
Off-site Soil Area 262	OFS-262-1	OFS-862-1	13-May-10	0	0.2	N	Potassium	3120		2980		mg/kg	2.3	RPD<20%
Off-site Soil Area 262	OFS-262-1	OFS-862-1	13-May-10	0	0.2	N	Thallium	0.14	J	0.31	J	mg/kg	**37.8**	Soil - RPD<20%
Off-site Soil Area 262	OFS-262-1	OFS-862-1	13-May-10	0	0.2	N	Vanadium	41.6		42.7		mg/kg	1.3	RPD<20%
Off-site Soil Area 262	OFS-262-1	OFS-862-1	13-May-10	0	0.2	N	Zinc	672		448		mg/kg	20.0	RPD<20%
Off-site Soil Area 263	OFS-263-1	OFS-863-1	13-May-10	0	0.2	N	Aluminum	17100		17100		mg/kg	0.0	RPD<20%
Off-site Soil Area 263	OFS-263-1	OFS-863-1	13-May-10	0	0.2	N	Arsenic	21		21		mg/kg	1.0	RPD<20%
Off-site Soil Area 263	OFS-263-1	OFS-863-1	13-May-10	0	0.2	N	Barium	269		289		mg/kg	3.6	RPD<20%
Off-site Soil Area 263	OFS-263-1	OFS-863-1	13-May-10	0	0.2	N	Beryllium	0.56		0.56		mg/kg	0.0	RPD<20%
Off-site Soil Area 263	OFS-263-1	OFS-863-1	13-May-10	0	0.2	N	Calcium	10000		11900		mg/kg	8.7	RPD<20%
Off-site Soil Area 263	OFS-263-1	OFS-863-1	13-May-10	0	0.2	N	Chromium	22.7		23.4		mg/kg	1.5	RPD<20%
Off-site Soil Area 263	OFS-263-1	OFS-863-1	13-May-10	0	0.2	N	Cobalt	12.7		13.1		mg/kg	1.6	RPD<20%
Off-site Soil Area 263	OFS-263-1	OFS-863-1	13-May-10	0	0.2	N	Copper	50		48		mg/kg	2.2	RPD<20%
Off-site Soil Area 263	OFS-263-1	OFS-863-1	13-May-10	0	0.2	N	Iron	21,100		21,400		mg/kg	0.7	RPD<20%
Off-site Soil Area 263	OFS-263-1	OFS-863-1	13-May-10	0	0.2	N	Lead	23.4		23.9		mg/kg	1.1	RPD<20%
Off-site Soil Area 263	OFS-263-1	OFS-863-1	13-May-10	0	0.2	N	Magnesium	6840		6870		mg/kg	0.2	RPD<20%
Off-site Soil Area 263	OFS-263-1	OFS-863-1	13-May-10	0	0.2	N	Manganese	585		657		mg/kg	5.8	RPD<20%
Off-site Soil Area 263	OFS-263-1	OFS-863-1	13-May-10	0	0.2	N	Nickel	32.1		32.6		mg/kg	0.8	RPD<20%
Off-site Soil Area 263	OFS-263-1	OFS-863-1	13-May-10	0	0.2	N	Potassium	2210		2270		mg/kg	1.3	RPD<20%
Off-site Soil Area 263	OFS-263-1	OFS-863-1	13-May-10	0	0.2	N	Vanadium	40.3		40.6		mg/kg	0.4	RPD<20%
Off-site Soil Area 263	OFS-263-1	OFS-863-1	13-May-10	0	0.2	N	Zinc	91		91		mg/kg	0.0	RPD<20%
Off-site Soil Area 264	OFS-264-1	OFS-864-1	13-May-10	0	0.2	N	Aluminum	20,500		20,800		mg/kg	0.7	RPD<20%
Off-site Soil Area 264	OFS-264-1	OFS-864-1	13-May-10	0	0.2	N	Arsenic	304		353		mg/kg	7.5	RPD<20%
Off-site Soil Area 264	OFS-264-1	OFS-864-1	13-May-10	0	0.2	N	Barium	121	J-	131	J-	mg/kg	4.0	RPD<20%
Off-site Soil Area 264	OFS-264-1	OFS-864-1	13-May-10	0	0.2	N	Cadmium	3.7	J	4.2	J	mg/kg	6.3	RPD<20%
Off-site Soil Area 264	OFS-264-1	OFS-864-1	13-May-10	0	0.2	N	Calcium	24100		18200		mg/kg	13.9	RPD<20%
Off-site Soil Area 264	OFS-264-1	OFS-864-1	13-May-10	0	0.2	N	Chromium	19.6		21.2		mg/kg	3.9	RPD<20%
Off-site Soil Area 264	OFS-264-1	OFS-864-1	13-May-10	0	0.2	N	Cobalt	24.3		26.5		mg/kg	4.3	RPD<20%
Off-site Soil Area 264	OFS-264-1	OFS-864-1	13-May-10	0	0.2	N	Copper	69.4		75.3		mg/kg	4.1	RPD<20%
Off-site Soil Area 264	OFS-264-1	OFS-864-1	13-May-10	0	0.2	N	Iron	37800		39500		mg/kg	2.2	RPD<20%
Off-site Soil Area 264	OFS-264-1	OFS-864-1	13-May-10	0	0.2	N	Lead	211		239		mg/kg	6.2	RPD<20%
Off-site Soil Area 264	OFS-264-1	OFS-864-1	13-May-10	0	0.2	N	Magnesium	10100		10400		mg/kg	1.5	RPD<20%
Off-site Soil Area 264	OFS-264-1	OFS-864-1	13-May-10	0	0.2	N	Manganese	1030		1140.0		mg/kg	5.1	RPD<20%
Off-site Soil Area 264	OFS-264-1	OFS-864-1	13-May-10	0	0.2	N	Mercury	1.1	J-	1	J-	mg/kg	4.8	RPD<20%
Off-site Soil Area 264	OFS-264-1	OFS-864-1	13-May-10	0	0.2	N	Nickel	20		21.6		mg/kg	3.8	RPD<20%
Off-site Soil Area 264	OFS-264-1	OFS-864-1	13-May-10	0	0.2	N	Potassium	2210		2400		mg/kg	4.1	RPD<20%
Off-site Soil Area 264	OFS-264-1	OFS-864-1	13-May-10	0	0.2	N	Selenium	4.1		4.5		mg/kg	4.7	RPD<20%
Off-site Soil Area 264	OFS-264-1	OFS-864-1	13-May-10	0	0.2	N	Sodium	67	J	70	J	mg/kg	2.3	RPD<20%
Off-site Soil Area 264	OFS-264-1	OFS-864-1	13-May-10	0	0.2	N	Vanadium	69.3		73.4		mg/kg	2.9	RPD<20%
Off-site Soil Area 264	OFS-264-1	OFS-864-1	13-May-10	0	0.2	N	Zinc	817		961		mg/kg	8.1	RPD<20%
Off-site Soil Area 265	OFS-265-1	OFS-865-1	13-May-10	0	0.2	N	Aluminum	15300		14600		mg/kg	2.3	RPD<20%
Off-site Soil Area 265	OFS-265-1	OFS-865-1	13-May-10	0	0.2	N	Arsenic	22.2		23.4		mg/kg	2.6	RPD<20%
Off-site Soil Area 265	OFS-265-1	OFS-865-1	13-May-10	0	0.2	N	Barium	214	J-	155	J-	mg/kg	16.0	RPD<20%
Off-site Soil Area 265	OFS-265-1	OFS-865-1	13-May-10	0	0.2	N	Cadmium	1.6	J	1.6	J	mg/kg	0.0	RPD<20%
Off-site Soil Area 265	OFS-265-1	OFS-865-1	13-May-10	0	0.2	N	Calcium	11700		10600		mg/kg	4.9	RPD<20%
Off-site Soil Area 265	OFS-265-1	OFS-865-1	13-May-10	0	0.2	N	Chromium	27.3		26.9		mg/kg	0.7	RPD<20%
Off-site Soil Area 265	OFS-265-1	OFS-865-1	13-May-10	0	0.2	N	Cobalt	15.2		14.1		mg/kg	3.8	RPD<20%
Off-site Soil Area 265	OFS-265-1	OFS-865-1	13-May-10	0	0.2	N	Copper	123		117		mg/kg	2.5	RPD<20%
Off-site Soil Area 265	OFS-265-1	OFS-865-1	13-May-10	0	0.2	N	Cyanide	1	J	1	J	mg/kg	0.9	RPD<20%
Off-site Soil Area 265	OFS-265-1	OFS-865-1	13-May-10	0	0.2	N	Iron	22,200		21,600		mg/kg	1.4	RPD<20%
Off-site Soil Area 265	OFS-265-1	OFS-865-1	13-May-10	0	0.2	N	Lead	39.7		41.5		mg/kg	2.2	RPD<20%
Off-site Soil Area 265	OFS-265-1	OFS-865-1	13-May-10	0	0.2	N	Magnesium	7,530		7,330		mg/kg	1.3	RPD<20%
Off-site Soil Area 265	OFS-265-1	OFS-865-1	13-May-10	0	0.2	N	Manganese	1410		915		mg/kg	**21.3**	Soil - RPD<20%
Off-site Soil Area 265	OFS-265-1	OFS-865-1	13-May-10	0	0.2	N	Mercury	0.071	J-	0.11	J-	mg/kg	**21.5**	Soil - RPD<20%
Off-site Soil Area 265	OFS-265-1	OFS-865-1	13-May-10	0	0.2	N	Nickel	30.1		30.7		mg/kg	1.0	RPD<20%
Off-site Soil Area 265	OFS-265-1	OFS-865-1	13-May-10	0	0.2	N	Potassium	4,350		4,080		mg/kg	3.2	RPD<20%
Off-site Soil Area 265	OFS-265-1	OFS-865-1	13-May-10	0	0.2	N	Selenium	2	J	2	J	mg/kg	2.4	RPD<20%
Off-site Soil Area 265	OFS-265-1	OFS-865-1	13-May-10	0	0.2	N	Sodium	90	J	94	J	mg/kg	2.2	RPD<20%
Off-site Soil Area 265	OFS-265-1	OFS-865-1	13-May-10	0	0.2	N	Vanadium	41.7		38.1		mg/kg	4.5	RPD<20%
Off-site Soil Area 265	OFS-265-1	OFS-865-1	13-May-10	0	0.2	N	Zinc	197		196		mg/kg	0.3	RPD<20%

Table D-1: Field Duplicate Relative Percent Difference Calculations

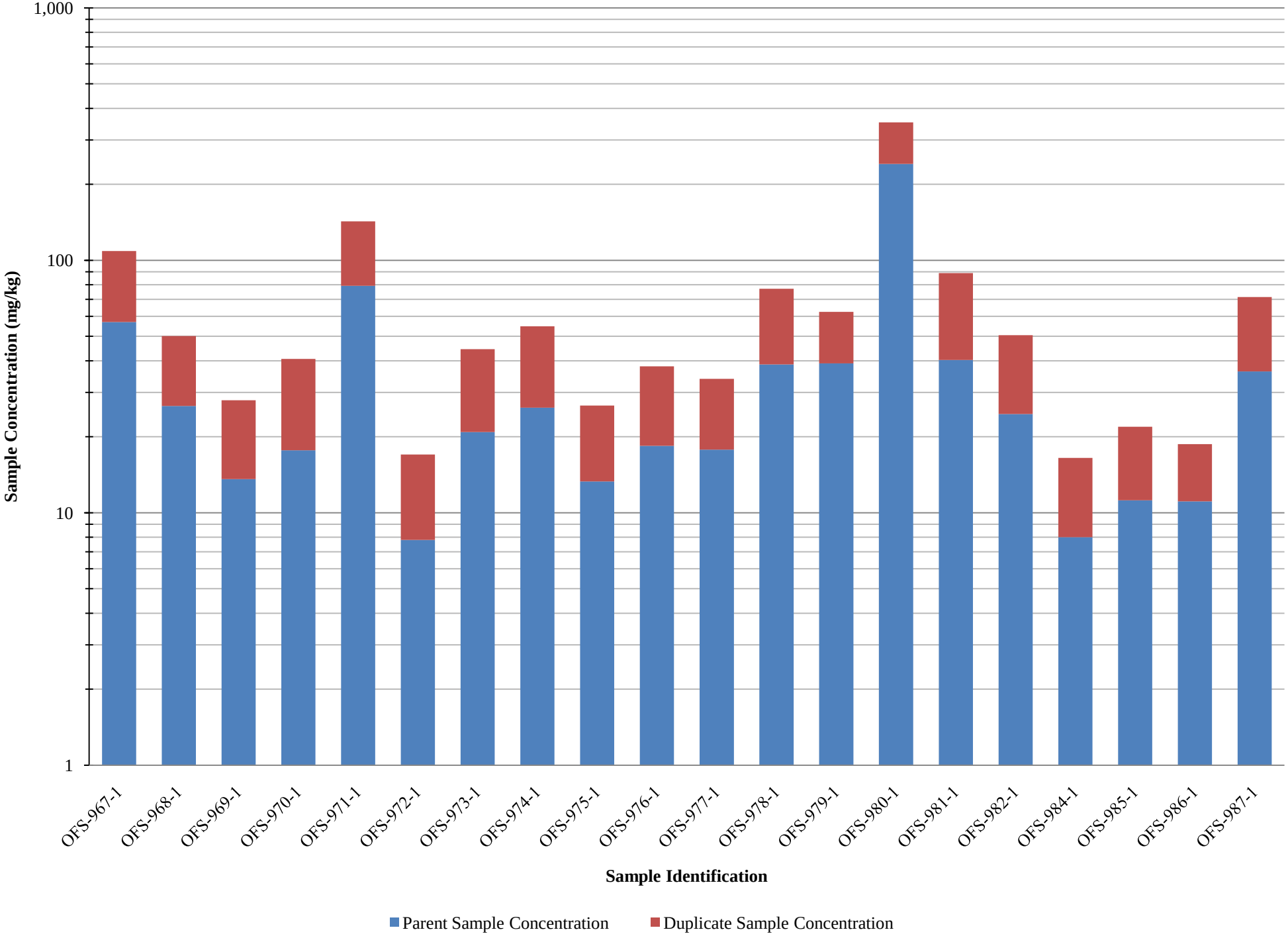
Sample Group	Site ID	Sample ID	Sample Date	Start Depth (Feet)	End Depth (Feet)	Total or Dissolved	Analyte	Parent Sample Concentration	Parent Sample Qualifier	Duplicate Sample Concentration	Duplicate Sample Qualifier	Units	Relative Percent Difference (%)	QC Limits
Off-site Soil Area 266	OFS-266-1	OFS-866-1	13-May-10	0	0.2	N	Aluminum	15200		15200		mg/kg	0.0	RPD<20%
Off-site Soil Area 266	OFS-266-1	OFS-866-1	13-May-10	0	0.2	N	Arsenic	14		14		mg/kg	0.0	RPD<20%
Off-site Soil Area 266	OFS-266-1	OFS-866-1	13-May-10	0	0.2	N	Barium	129		133		mg/kg	1.5	RPD<20%
Off-site Soil Area 266	OFS-266-1	OFS-866-1	13-May-10	0	0.2	N	Calcium	13,600		14,900		mg/kg	4.6	RPD<20%
Off-site Soil Area 266	OFS-266-1	OFS-866-1	13-May-10	0	0.2	N	Chromium	22.5		18.6		mg/kg	9.5	RPD<20%
Off-site Soil Area 266	OFS-266-1	OFS-866-1	13-May-10	0	0.2	N	Cobalt	13.8		14.9		mg/kg	3.8	RPD<20%
Off-site Soil Area 266	OFS-266-1	OFS-866-1	13-May-10	0	0.2	N	Copper	23.5		23		mg/kg	1.1	RPD<20%
Off-site Soil Area 266	OFS-266-1	OFS-866-1	13-May-10	0	0.2	N	Iron	21700		21600		mg/kg	0.2	RPD<20%
Off-site Soil Area 266	OFS-266-1	OFS-866-1	13-May-10	0	0.2	N	Lead	16.8		15.8		mg/kg	3.1	RPD<20%
Off-site Soil Area 266	OFS-266-1	OFS-866-1	13-May-10	0	0.2	N	Magnesium	7190		7220		mg/kg	0.2	RPD<20%
Off-site Soil Area 266	OFS-266-1	OFS-866-1	13-May-10	0	0.2	N	Manganese	538		573		mg/kg	3.2	RPD<20%
Off-site Soil Area 266	OFS-266-1	OFS-866-1	13-May-10	0	0.2	N	Nickel	19.7		19.5		mg/kg	0.5	RPD<20%
Off-site Soil Area 266	OFS-266-1	OFS-866-1	13-May-10	0	0.2	N	Potassium	2110		2170		mg/kg	1.4	RPD<20%
Off-site Soil Area 266	OFS-266-1	OFS-866-1	13-May-10	0	0.2	N	Vanadium	38.4		38.6		mg/kg	0.3	RPD<20%
Off-site Soil Area 266	OFS-266-1	OFS-866-1	13-May-10	0	0.2	N	Zinc	99.9929	J	103	J	mg/kg	1.5	RPD<20%
Off-site Soil Area 267	OFS-267-1	OFS-867-1	30-Jun-10	0	0.2	N	Aluminum	13300		14400		mg/kg	4.0	RPD<20%
Off-site Soil Area 267	OFS-267-1	OFS-867-1	30-Jun-10	0	0.2	N	Antimony	0.47	J	0.45	J	mg/kg	2.2	RPD<20%
Off-site Soil Area 267	OFS-267-1	OFS-867-1	30-Jun-10	0	0.2	N	Arsenic	51.6		53.6		mg/kg	1.9	RPD<20%
Off-site Soil Area 267	OFS-267-1	OFS-867-1	30-Jun-10	0	0.2	N	Barium	145		142		mg/kg	1.0	RPD<20%
Off-site Soil Area 267	OFS-267-1	OFS-867-1	30-Jun-10	0	0.2	N	Beryllium	0.55	J	0.54	J	mg/kg	0.9	RPD<20%
Off-site Soil Area 267	OFS-267-1	OFS-867-1	30-Jun-10	0	0.2	N	Cadmium	2		2		mg/kg	2.7	RPD<20%
Off-site Soil Area 267	OFS-267-1	OFS-867-1	30-Jun-10	0	0.2	N	Calcium	5080		6370		mg/kg	11.3	RPD<20%
Off-site Soil Area 267	OFS-267-1	OFS-867-1	30-Jun-10	0	0.2	N	Chromium	18		19		mg/kg	2.9	RPD<20%
Off-site Soil Area 267	OFS-267-1	OFS-867-1	30-Jun-10	0	0.2	N	Cobalt	11.7		11.4		mg/kg	1.3	RPD<20%
Off-site Soil Area 267	OFS-267-1	OFS-867-1	30-Jun-10	0	0.2	N	Copper	59.5		56.5		mg/kg	2.6	RPD<20%
Off-site Soil Area 267	OFS-267-1	OFS-867-1	30-Jun-10	0	0.2	N	Cyanide	0.15	J	0.12	J	mg/kg	11.1	RPD<20%
Off-site Soil Area 267	OFS-267-1	OFS-867-1	30-Jun-10	0	0.2	N	Iron	27600		28000		mg/kg	0.7	RPD<20%
Off-site Soil Area 267	OFS-267-1	OFS-867-1	30-Jun-10	0	0.2	N	Lead	137		125		mg/kg	4.6	RPD<20%
Off-site Soil Area 267	OFS-267-1	OFS-867-1	30-Jun-10	0	0.2	N	Magnesium	5,900		6,200		mg/kg	2.5	RPD<20%
Off-site Soil Area 267	OFS-267-1	OFS-867-1	30-Jun-10	0	0.2	N	Manganese	625		631		mg/kg	0.5	RPD<20%
Off-site Soil Area 267	OFS-267-1	OFS-867-1	30-Jun-10	0	0.2	N	Mercury	0.25		0.4		mg/kg	16.7	RPD<20%
Off-site Soil Area 267	OFS-267-1	OFS-867-1	30-Jun-10	0	0.2	N	Nickel	4	J	5.3	J	mg/kg	14.0	RPD<20%
Off-site Soil Area 267	OFS-267-1	OFS-867-1	30-Jun-10	0	0.2	N	Potassium	3700		3800		mg/kg	1.3	RPD<20%
Off-site Soil Area 267	OFS-267-1	OFS-867-1	30-Jun-10	0	0.2	N	Sodium	56.5	J	59.6	J	mg/kg	2.7	RPD<20%
Off-site Soil Area 267	OFS-267-1	OFS-867-1	30-Jun-10	0	0.2	N	Vanadium	47.2		51.1		mg/kg	4.0	RPD<20%
Off-site Soil Area 267	OFS-267-1	OFS-867-1	30-Jun-10	0	0.2	N	Zinc	347	J	342	J	mg/kg	0.7	RPD<20%
Off-site Soil Area 268	OFS-268-1	OFS-868-1	30-Jun-10	0	0.2	N	Aluminum	14,000		12,200		mg/kg	6.9	RPD<20%
Off-site Soil Area 268	OFS-268-1	OFS-868-1	30-Jun-10	0	0.2	N	Antimony	1.4	J	2	J	mg/kg	17.6	RPD<20%
Off-site Soil Area 268	OFS-268-1	OFS-868-1	30-Jun-10	0	0.2	N	Arsenic	55.3		51.8		mg/kg	3.3	RPD<20%
Off-site Soil Area 268	OFS-268-1	OFS-868-1	30-Jun-10	0	0.2	N	Barium	147		143		mg/kg	1.4	RPD<20%
Off-site Soil Area 268	OFS-268-1	OFS-868-1	30-Jun-10	0	0.2	N	Beryllium	0.53	J	0.53	J	mg/kg	0.0	RPD<20%
Off-site Soil Area 268	OFS-268-1	OFS-868-1	30-Jun-10	0	0.2	N	Cadmium	2		2		mg/kg	11.1	RPD<20%
Off-site Soil Area 268	OFS-268-1	OFS-868-1	30-Jun-10	0	0.2	N	Calcium	2150		2030		mg/kg	2.9	RPD<20%
Off-site Soil Area 268	OFS-268-1	OFS-868-1	30-Jun-10	0	0.2	N	Chromium	27.9		28.6		mg/kg	1.2	RPD<20%
Off-site Soil Area 268	OFS-268-1	OFS-868-1	30-Jun-10	0	0.2	N	Cobalt	13.1		14.4		mg/kg	4.7	RPD<20%
Off-site Soil Area 268	OFS-268-1	OFS-868-1	30-Jun-10	0	0.2	N	Copper	192		216		mg/kg	5.9	RPD<20%
Off-site Soil Area 268	OFS-268-1	OFS-868-1	30-Jun-10	0	0.2	N	Iron	35700		31700		mg/kg	5.9	RPD<20%
Off-site Soil Area 268	OFS-268-1	OFS-868-1	30-Jun-10	0	0.2	N	Lead	71		70		mg/kg	0.7	RPD<20%
Off-site Soil Area 268	OFS-268-1	OFS-868-1	30-Jun-10	0	0.2	N	Magnesium	5650		4340		mg/kg	13.1	RPD<20%
Off-site Soil Area 268	OFS-268-1	OFS-868-1	30-Jun-10	0	0.2	N	Manganese	821		803		mg/kg	1.1	RPD<20%
Off-site Soil Area 268	OFS-268-1	OFS-868-1	30-Jun-10	0	0.2	N	Mercury	0	J	0	J	mg/kg	**33.3**	Soil - RPD<20%
Off-site Soil Area 268	OFS-268-1	OFS-868-1	30-Jun-10	0	0.2	N	Nickel	7	J	9	J	mg/kg	7.6	RPD<20%
Off-site Soil Area 268	OFS-268-1	OFS-868-1	30-Jun-10	0	0.2	N	Potassium	2,810		2,540		mg/kg	5.0	RPD<20%
Off-site Soil Area 268	OFS-268-1	OFS-868-1	30-Jun-10	0	0.2	N	Sodium	44.9	J	36.7	J	mg/kg	10.0	RPD<20%
Off-site Soil Area 268	OFS-268-1	OFS-868-1	30-Jun-10	0	0.2	N	Vanadium	66		62		mg/kg	3.4	RPD<20%
Off-site Soil Area 268	OFS-268-1	OFS-868-1	30-Jun-10	0	0.2	N	Zinc	194		184		mg/kg	2.6	RPD<20%

Notes:
J = The analyte was positively identified, but the associated numerical value is estimated.
J- = The analyte was positively identified, but the associated numerical value is estimated with a potential low bias.
J+ = The analyte was positively identified, but the associated numerical value is estimated with a potential high bias.
mg/kg = Milligrams per kilogram
ug/L = Micrograms per Liter
RPD = Relative percent difference

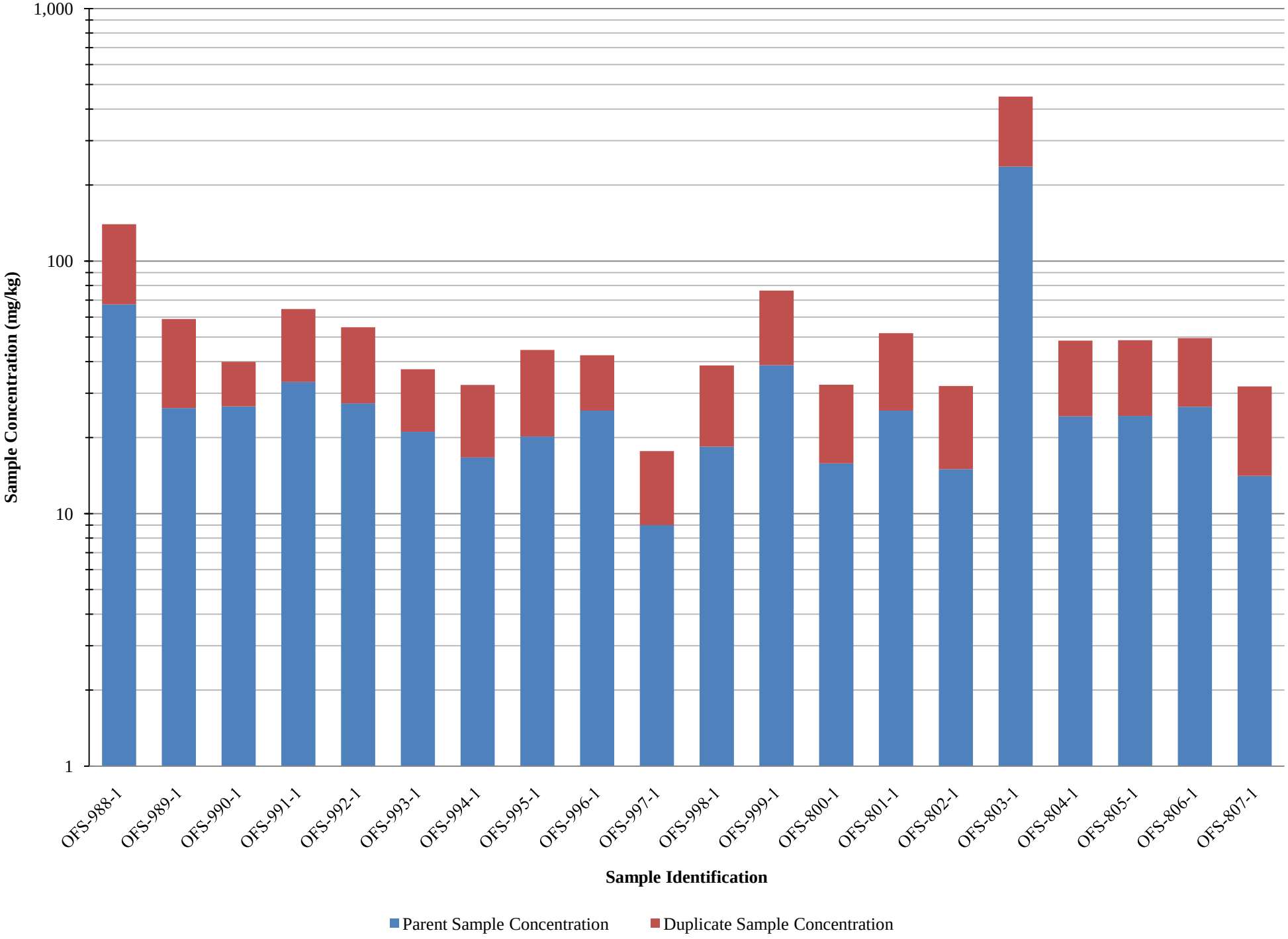
Field Duplicate Relative Percent Difference - Arsenic in Background and Off-Site Soil



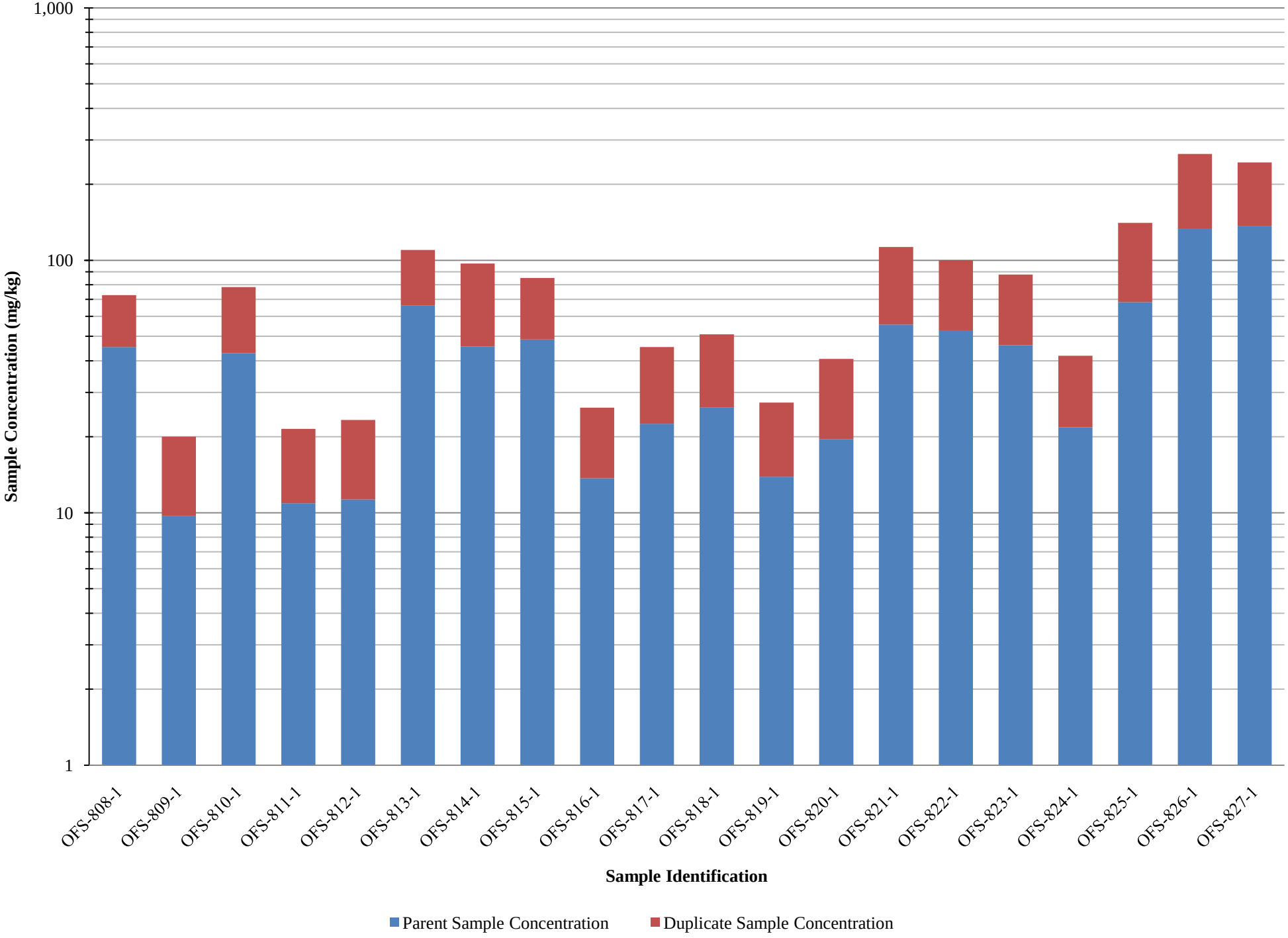
Field Duplicate Relative Percent Difference - Arsenic in Off-Site Soil



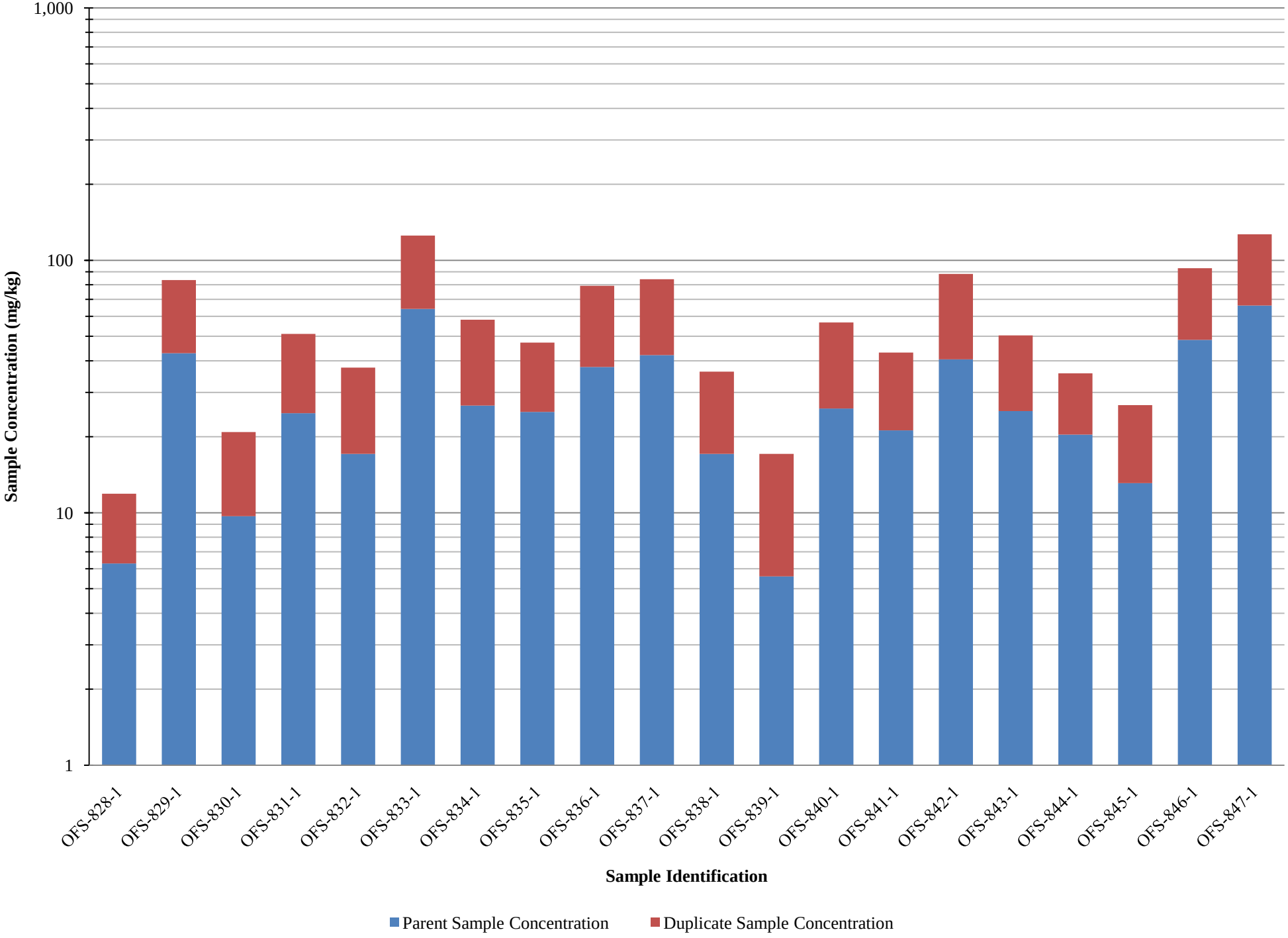
Field Duplicate Relative Percent Difference - Arsenic in Off-Site Soil



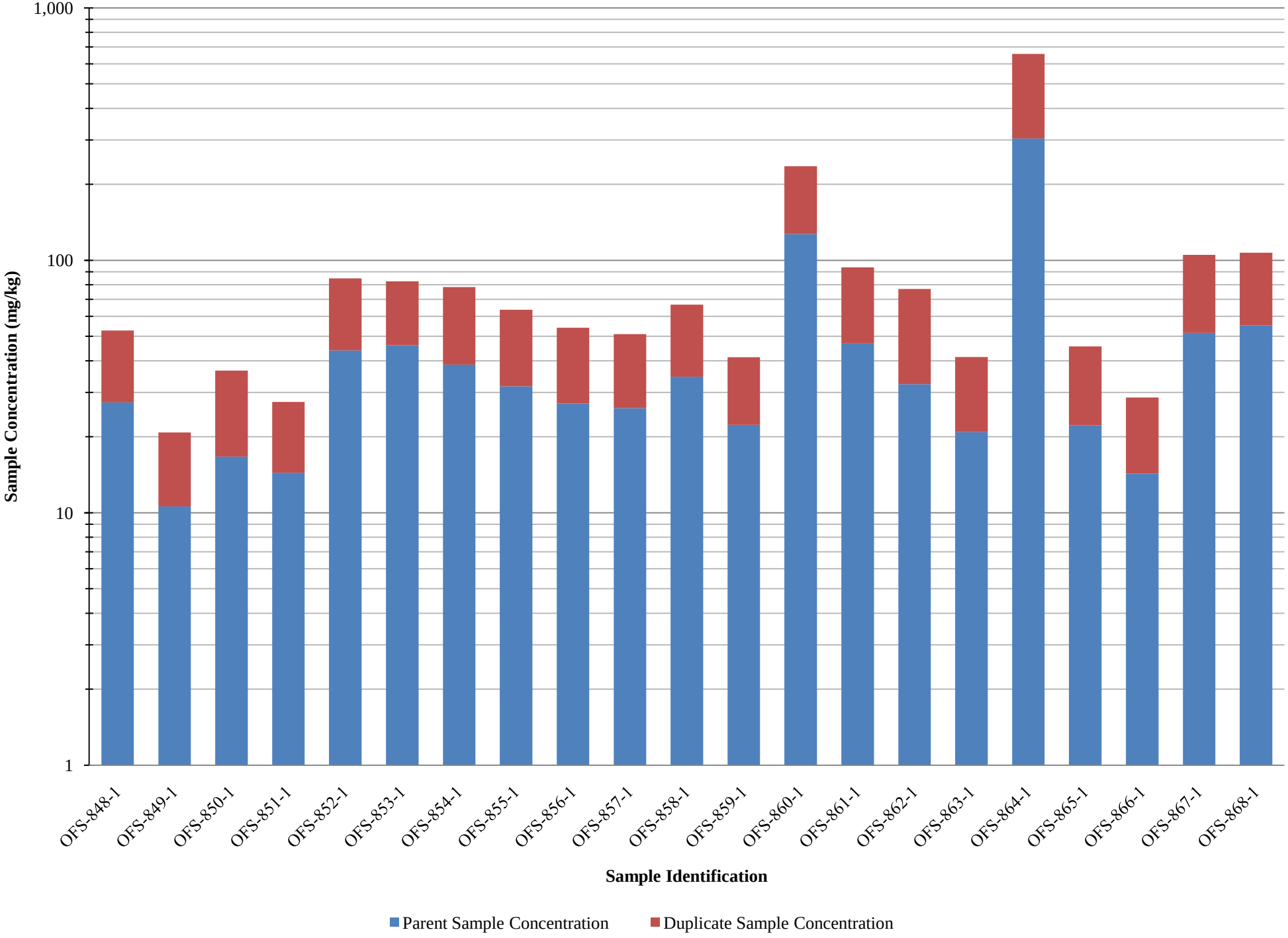
Field Duplicate Relative Percent Difference - Arsenic in Off-Site Soil

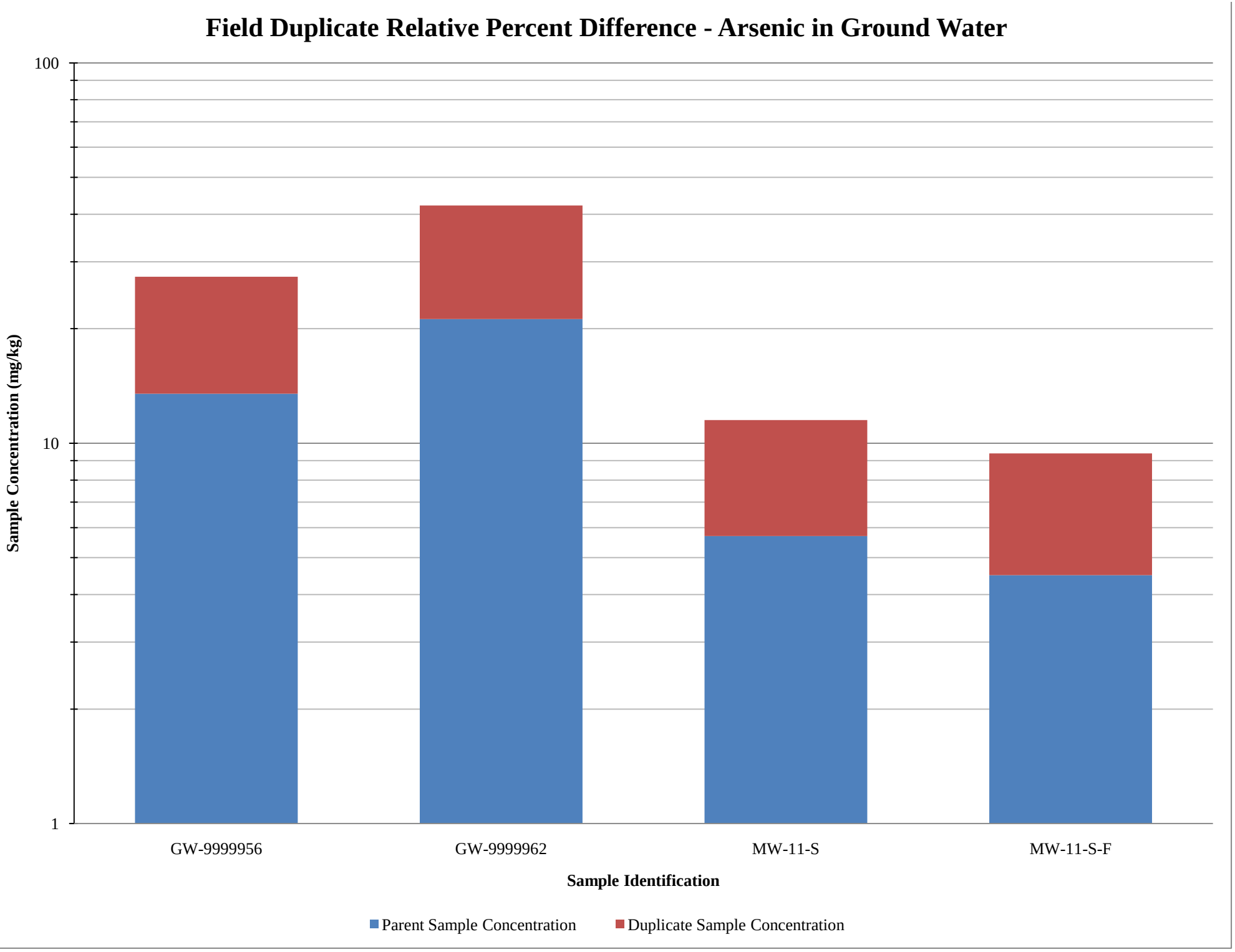


Field Duplicate Relative Percent Difference - Arsenic in Off-Site Soil

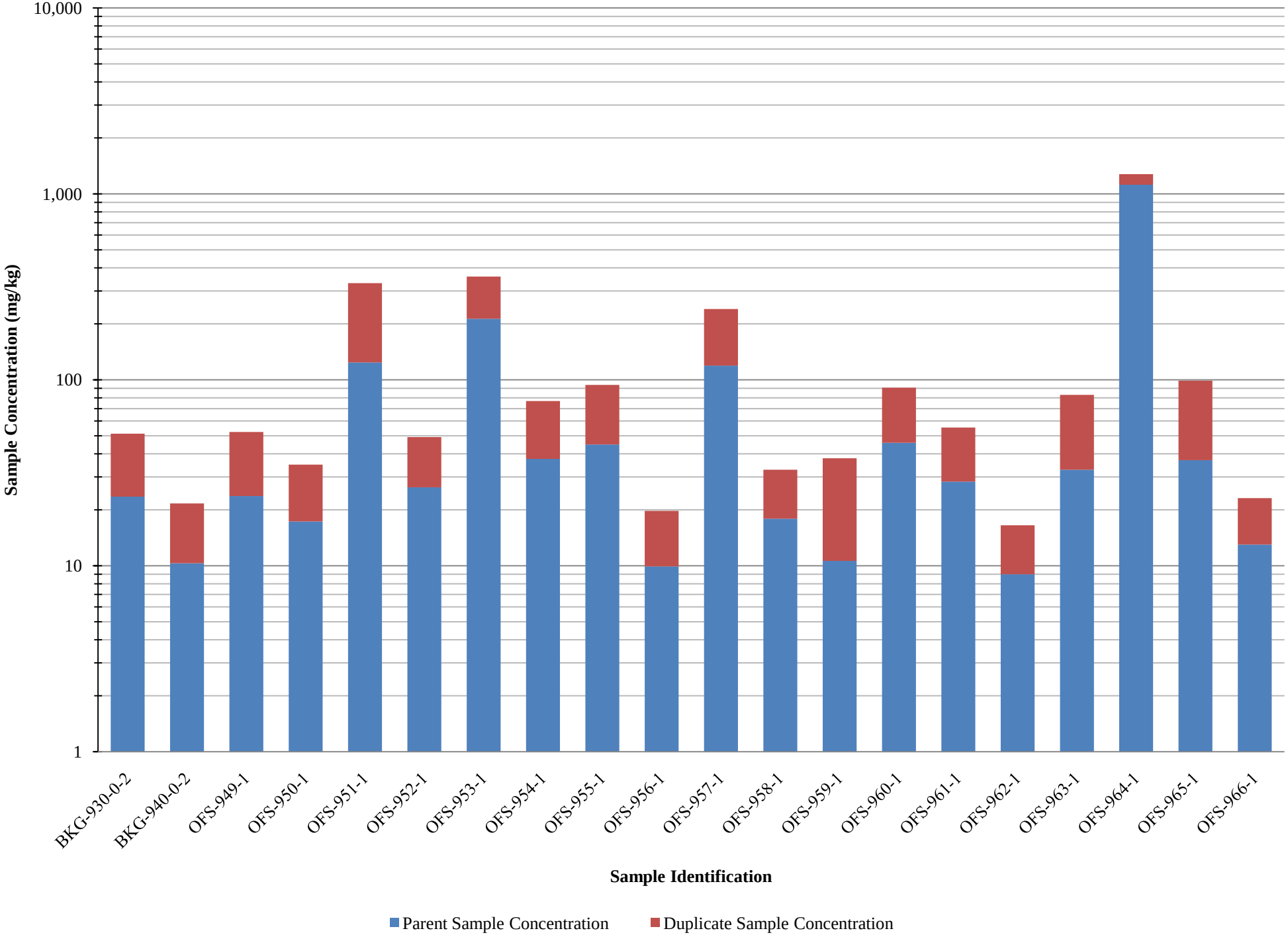


Field Duplicate Relative Percent Difference - Arsenic in Off-Site Soil

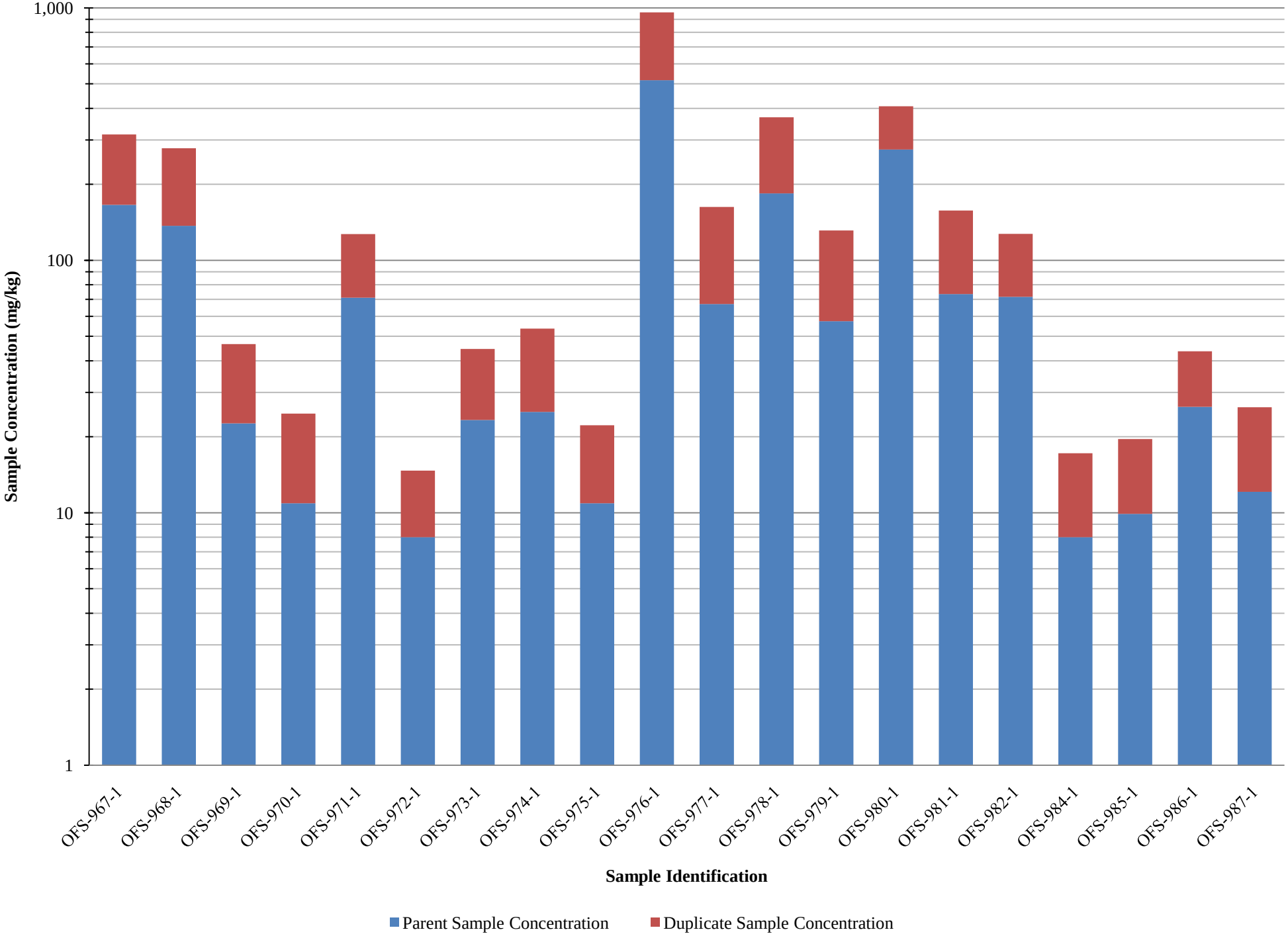



Field Duplicate Relative Percent Difference - Arsenic in Ground Water
100
10
1
Sample Concentration (mg/kg)
GW-9999956
GW-9999962
MW-11-S
MW-11-S-F
Sample Identification
Parent Sample Concentration
Duplicate Sample Concentration

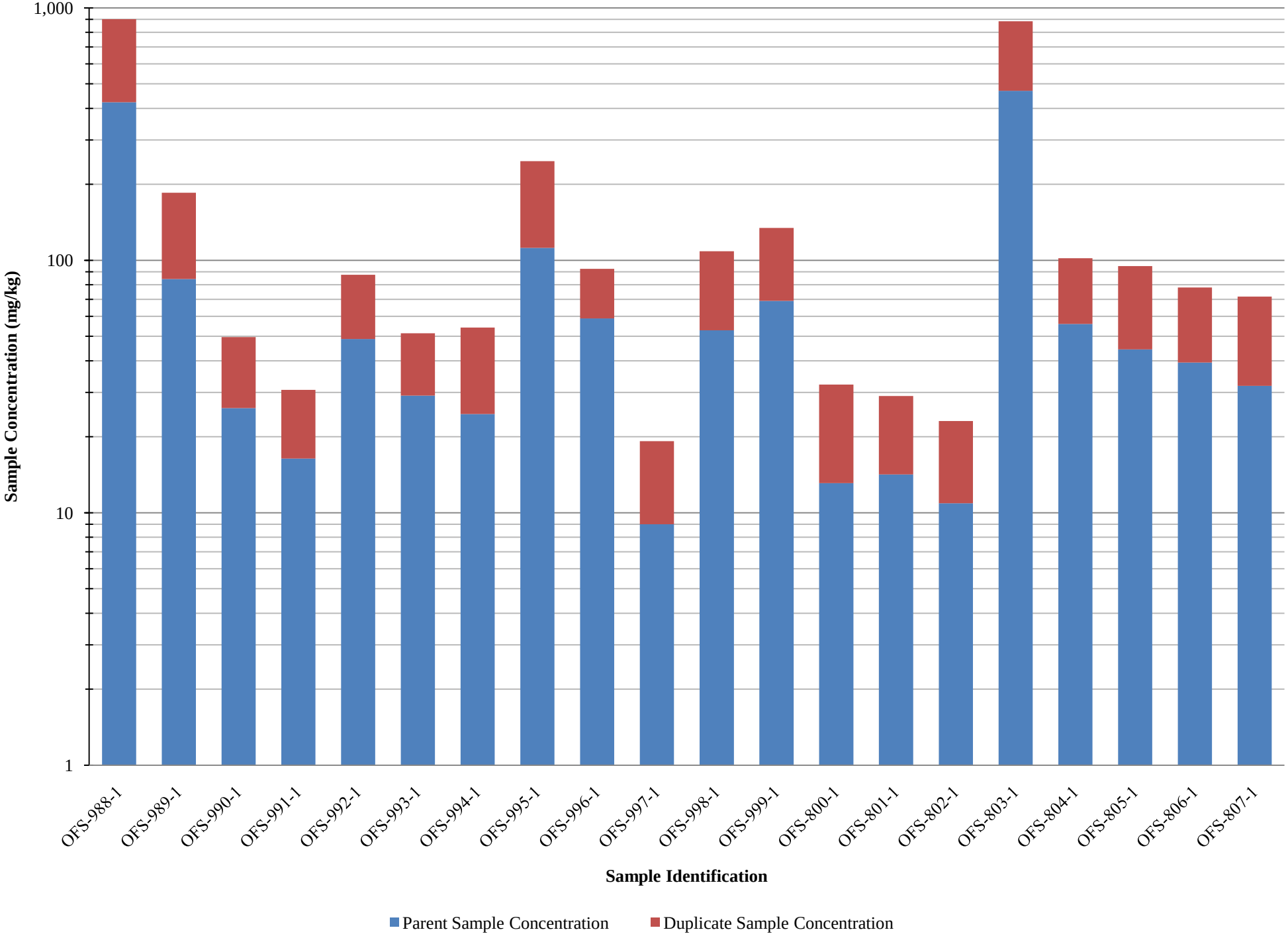
Field Duplicate Relative Percent Difference - Lead in Background and Off-Site Soil



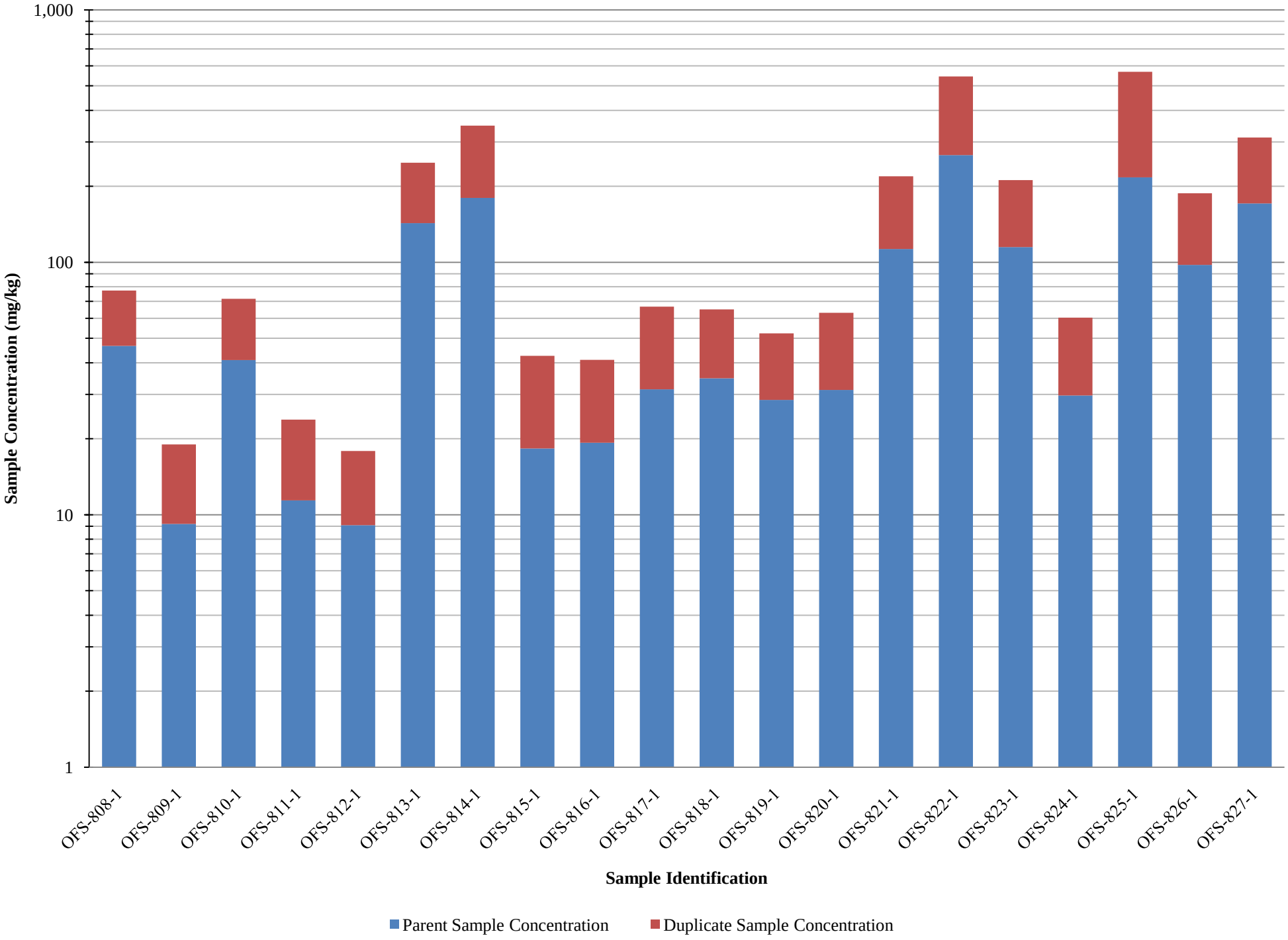
Field Duplicate Relative Percent Difference - Lead in Off-Site Soil



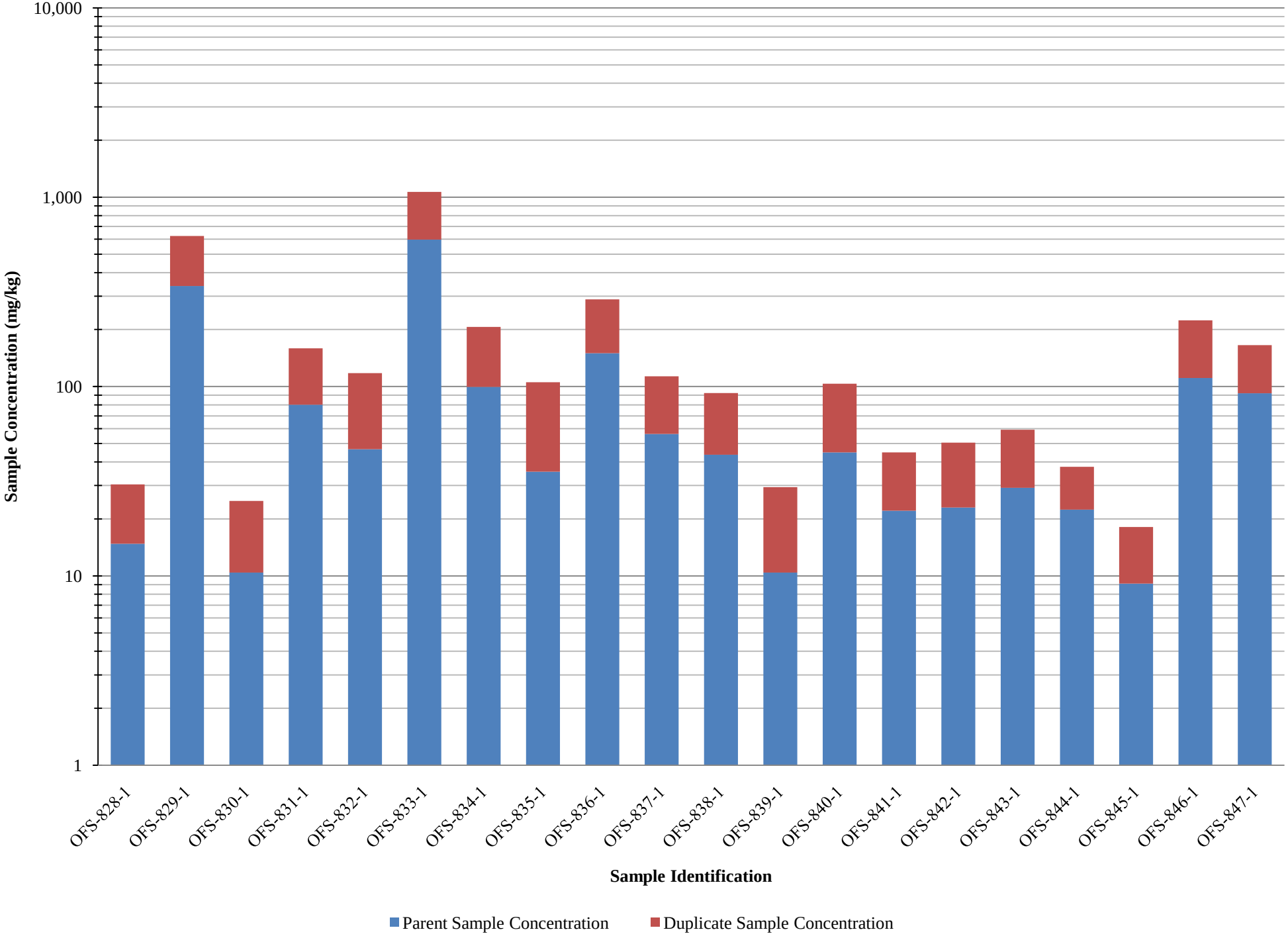
Field Duplicate Relative Percent Difference - Lead in Off-Site Soil



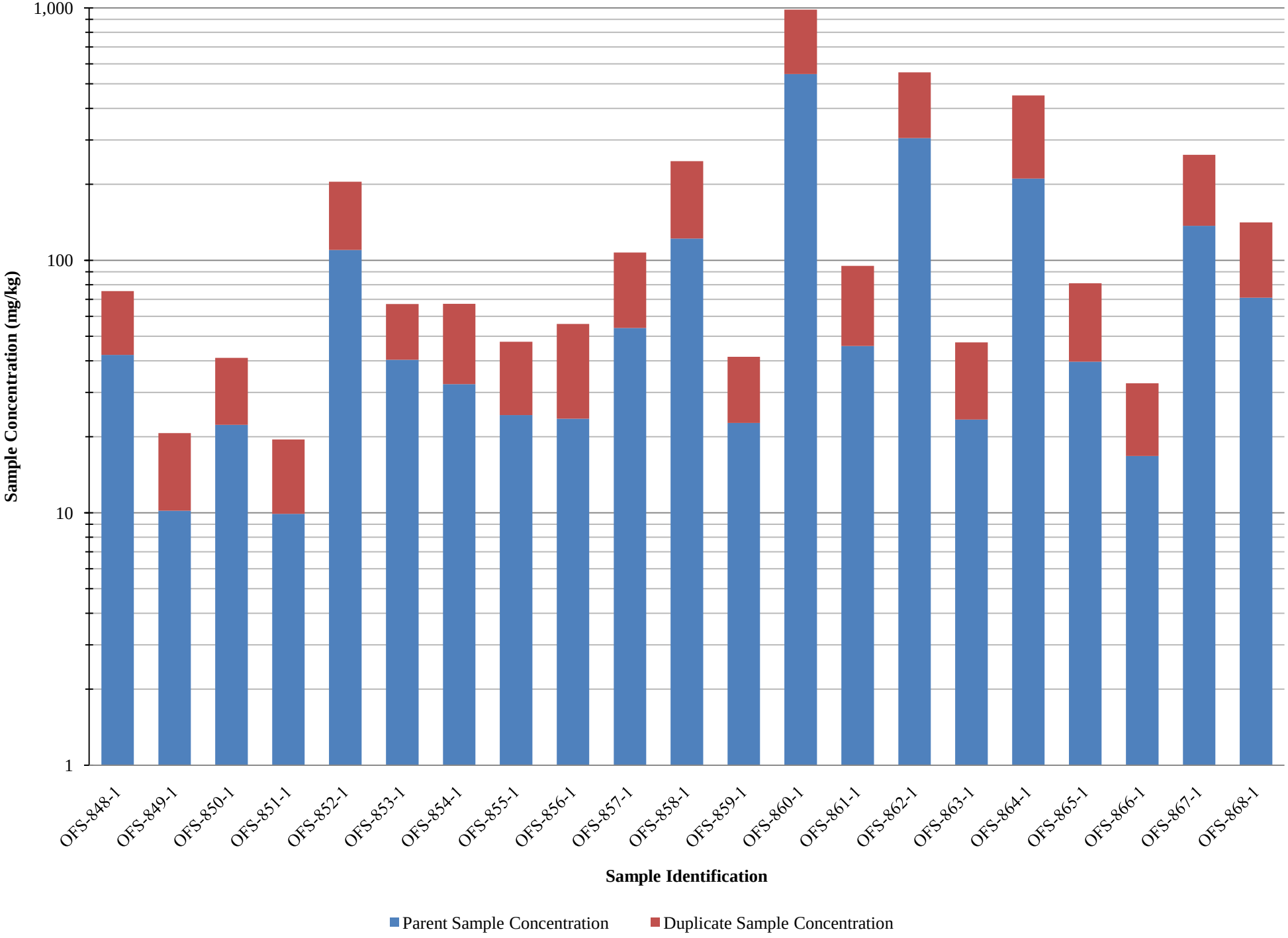
Field Duplicate Relative Percent Difference - Lead in Off-Site Soil

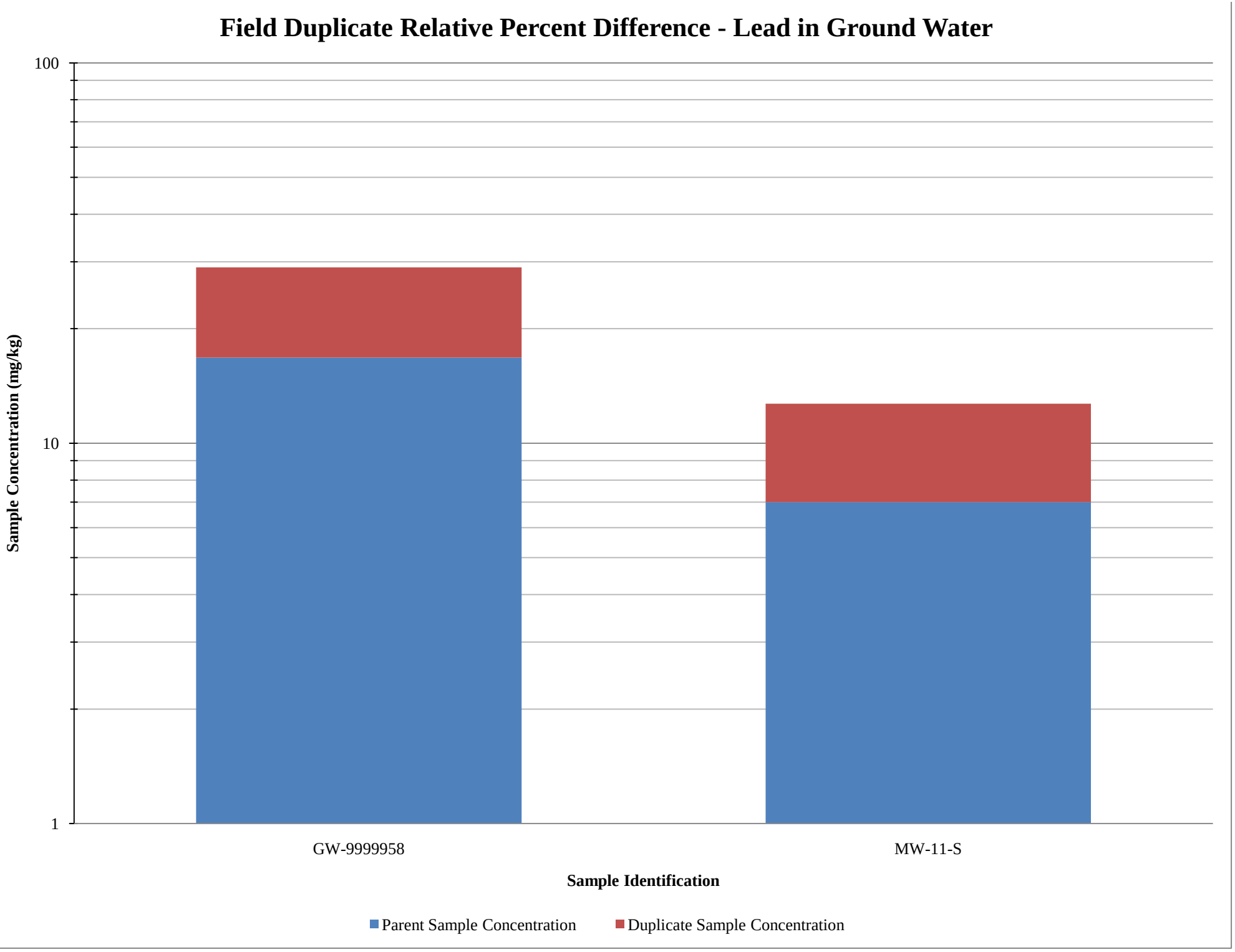


Field Duplicate Relative Percent Difference - Lead in Off-Site Soil



Field Duplicate Relative Percent Difference - Lead in Off-Site Soil




Field Duplicate Relative Percent Difference - Lead in Ground Water
100
10
1
Sample Concentration (mg/kg)
GW-9999958
MW-11-S
Sample Identification
Parent Sample Concentration
Duplicate Sample Concentration