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Weston Solutions, Inc.  
Suite 201  
1090 King Georges Post Road  
Edison, New Jersey 08837-3703  
732-585-4400 • Fax: 732-225-7037  
[www.westonsolutions.com](http://www.westonsolutions.com)

REMOVAL SUPPORT TEAM 2  
EPA CONTRACT EP-W-06-072

July 29, 2013

Ms. Kimberly Staiger, On-Scene Coordinator  
U.S. Environmental Protection Agency  
Removal Action Branch  
2890 Woodbridge Avenue  
Edison, NJ 08837

**EPA CONTRACT NO: EP-W-06-072**

**TDD NO: TO-0029-0031**

**DOCUMENT CONTROL NO: RST2-02-F-2491**

**SUBJECT: FINAL SOIL SAMPLING TRIP REPORT -BARTH SMELTING  
CORPORATION SITE – PROPERTY P002 (TERRELL HOMES) ,  
NEWARK, ESSEX COUNTY, NEW JERSEY**

Dear Ms. Staiger:

Enclosed please find the Draft Soil Sampling Trip Report for the sampling events conducted at Terrel Homes low-income housing complex (Terrel Homes) portion of the Barth Smelting Corporation Site located at 27 Riverview Terrace, Newark, Essex County, New Jersey. Sample were collected on March 29, April 1, May 15 and May 16, 2013 as a part of the assessment at Terrell Homes. If you have any questions or comments, please contact me at (732) 585-4441.

Sincerely,

WESTON SOLUTIONS, INC.

*Dipa Clewan*

for Scott T. Snyder, CHMM  
RST 2 Site Project Manager/Group Leader

Enclosure  
cc: TDD File No.: TO-0029-0031

## **FINAL SOIL SAMPLING TRIP REPORT**

**SITE NAME:** Barth Smelting Corporation Site – Property P002 (Terrell Homes)  
DC No.: RST2-02-F-2446  
TDD No.: TO-0029-0031

**SAMPLING DATE:** March 29, April 1, May 15 and May 16, 2013

**EPA ID NO.:** NJN008010373

**1. Site Location:** Barth Smelting Corporation Site – Property P002 (Terrell Homes)  
27 Riverview Terrace, Newark, Essex County, New Jersey  
(Refer to Attachment A, Figure 1 – Site Location Map)

### **2. Sample Summary:**

Weston Solutions, Inc., Removal Support Team (RST 2) conducted two sampling events at Barth Smelting Corporation Site (the Site) to assess the extent of contamination at the Terrell Homes low-income housing complex (Terrell Homes), located at 59-97 Chapel Street, Newark, New Jersey, adjacent to the footprint of the former Barth Smelting facility. During the March/April 2013 sampling event, conducted on March 29 and April 1, 2013, RST 2 collected a total of 166 soil samples, including nine field duplicates, from the Terrell Homes portion of the Site. As part of this soil sampling event, RST 2 also collected four rinsate blank samples. All soil samples were collected using Geoprobe® direct-push method. A total of 166 soil samples and four rinsate blank sample were submitted to the U.S. Environmental Protection Agency (EPA) Region II Division of Environmental Science and Assessment (DESA) laboratory in Edison, New Jersey for target analyte list (TAL) metal (including mercury and tin) analysis. Refer to Attachment B, Table 1A for sample collection information.

During the May 2013 sampling event, conducted from May 15 to 16, 2013, RST 2 collected a total of 155 soil samples from the grassy area adjacent to the Community Building at Terrell Homes. All soil samples were collected manually using a hand-driven bucket auger and were screened in the field using an Innov-X portable x-ray Fluorescence (XRF) instrument. Approximately 10 percent (%) of the samples were selected for laboratory analysis based on the field screening levels for lead. A total of 14 soil samples, including one field duplicate, and two rinsate blank samples were submitted to the EPA DESA laboratory in Edison, New Jersey for TAL metal (including mercury and tin) analysis. Refer to Attachment B, Table 1B for sample collection information, and Table 2 for Field Screening Data for Lead.

### **3. Laboratories Receiving Samples:**

The following laboratories were utilized during the soil sampling event:

Sample Matrix	Analysis	Laboratory
Soil	TAL Metals (including Hg and Sn)	EPA Region II DESA Laboratory 2890 Woodbridge Ave. Building 209, MS-230 Edison, NJ 08837
Rinsate Blank		

TAL = Target Analyte List

Sn = Tin

Hg = Mercury

EPA = U.S. Environmental Protection Agency

DESA = Division of Environmental Science and Assessment

### **4. Sample Dispatch Data:**

On April 2, 2013, RST 2 hand-delivered 166 soil samples, including nine field duplicates, and two rinsate blank samples to DESA, located in Edison, New Jersey, for TAL metal (including mercury and tin) analysis. All samples collected on March 29, 2013 were delivered under Chain of Custody (COC) Record Number 2-040213-070554-0002, and all samples collected on April 1, 2013 were delivered under COC Record Number 2-040213-081509-0003.

On May 17, 2013, RST 2 hand-delivered 14 soil samples, including one field duplicate, and two rinsate blank samples to DESA, located in Edison, New Jersey, for TAL metal (including mercury and tin) analysis. All samples were delivered under COC Record Number 2-051713-103100-0004.

### **5. On-Site Personnel:**

Name	Representing	Duties On-Site
Kimberly Staiger	EPA, Region II	On-Scene Coordinator
Scott Snyder	RST 2, Region II	Site Project Manager, Site Health & Safety, Sample Management, Site QA/QC, Global Positioning System (GPS) Data Collection, and Geoprobe® Oversight
Dipanjali Chavan	RST 2, Region II	Sample Collection
Michael Garibaldi	RST 2, Region II	Site Project Manager, Site Health & Safety, Sample Collection, Sample Management
Aleksandra Mallon	RST 2, Region II	XRF Technician
Joseph Bundens	RST 2, Region II	Sample Collection
Michael Beuthe	RST 2, Region II	Sample Collection
John Rush	TPI, Inc.	Geoprobe® Operator
George Demitry	TPI, Inc.	Assistant Driller

## **6. Site Background and Description:**

The Site is located in the Ironbound Section of Newark, New Jersey, adjacent to the Passaic River. The Ironbound section of Newark is historically an industrialized neighborhood. The area of the Site under investigation has been industrialized since the late 1800s. The property at 99 Chapel Street (Property P001) is currently occupied by various maritime shipping and maintenance facilities. Barth Smelting Corp. Site is defined as the historic footprint of the Barth Smelting facility (Block 2442, Lots 10 – 12) and the extent of contamination. This includes a portion of the 99 Chapel Street property (Block 2442, Lots 10 – 12) and the Terrell Homes property located at 59-97 Chapel Street. Barth Smelting Corp. was in operation from at least 1946 until approximately 1982, and produced brass and bronze ingots and also worked with non-ferrous metals. Prior operators include General Lead Batteries, a manufacturer of lead acid batteries, and the New Jersey Zinc Company, a former zinc smelter. Barth was listed as an unrecognized Battery Lead Smelter site with a paper titled “Discovering Unrecognized Lead Smelting Sites by Historical Methods” written by William Eckel et al, and published in the American Journal of Public Health, April 2001, however, several resources exist labeling Barth Smelting as a secondary copper smelting facility. The New Jersey Zinc and Iron Company, also known as the Newark Zinc Works, formerly operated on the property now occupied by the Newark Housing Authority’s Terrell Homes and also on the property formerly occupied by Barth Smelting. The Zinc Works was one of the first commercial zinc oxide plants in the United States and operated on Chapel Street from 1848 to 1910. In 1946, the Millard E. Terrell Homes, a family development with 275 units, was constructed on the property formerly occupied by the New Jersey Zinc & Iron Company. A playground and grass-covered play area are located on housing authority property just beyond the fence that separates the 99 Chapel Street portion of the Site and the apartment complex. Additional residential properties are located across Chapel Street to the east.

## **7. Sample Collection Methodology**

During the March/April 2013 sampling event, RST 2 advanced 36 boreholes within the Terell Home portion of the Site to a depth of 2 feet below ground surface (bgs) using Geoprobe® direct-push method. RST 2 collected a total of 166 soil samples, including nine field duplicate samples from the Terrell Homes. Borehole locations were recorded electronically using Global Positioning System (GPS) technology. From direct-push boreholes advanced within the unpaved/grassy areas of Terrell Homes, RST 2 collected soil samples from depths of 0-1 inch, 1-6 inches, 6-12 inches, 12-18 inches, and 18-24 inches. From direct-push boreholes advanced within the paved areas, the sample depths were altered due to asphalt and gravel bedding, and samples were collected from depths of 3-6 inches, 6-12 inches, 12-18 inches, and 18-24 inches. The soil samples were submitted to the EPA DESA laboratory in Edison, New Jersey for TAL metal (including mercury and tin) analysis. Soil samples collected from the uppermost interval from each borehole were designated for sieving with a 250-micron stainless steel sieve and pan.

During the May 2013 sampling event, RST 2 advanced 34 boreholes within the grassy area adjacent to the Community Building at Terrell Homes to a depth of 2 feet bgs using a hand auger. RST 2 collected a total of 155 soil samples. Samples were generally collected from depths of 0-1 inch, 1-6 inches, 6-12 inches, 12-18 inches, and 18-24 inches. The presence of asphalt, coarse material such as gravel, and subsurface concrete altered the sampling depths at

some locations. Borehole locations were recorded electronically using GPS technology. The soil samples were screened for lead on-site using an XRF instrument with 10% (14 soil samples including one duplicate) submitted to the EPA DESA laboratory for TAL metals (including mercury and tin) analysis. The samples were collected in a 6 by 9 inch plastic bag, homogenized, dried if necessary, and analyzed three times using the XRF. Organic debris was removed from the sample before it was homogenized. Each XRF sample screening interval lasted one minute. The three screening intervals were then averaged to determine the approximate lead and tin concentrations. Field screening samples were collected with dedicated plastic scoops. Refer to Attachment B, Table 2 for Field Screening Data for Lead.

Soil samples were collected in 4-ounce (oz.) jars (as requested by the lab). Field duplicate and matrix spike/matrix spike duplicate (MS/MSD) samples were collected at a rate of one per 20 soil samples (inclusive of samples collected at the adjacent 99 Chapel Street). Soil samples were collected using dedicated plastic scoops. One rinsate blank sample was collected from a decontaminated Geoprobe® cutting shoe during the March/April 2013 sampling event and from decontaminated hand auger during the May 2013 sampling event, at a rate of one per day of sampling to demonstrate adequate decontamination of non-dedicated sampling equipment. Boreholes were backfilled and capped with remaining soil from the respective borehole. After the samples were collected, the sample information was entered into Scribe sample management database from which sample labels and chain of custody documents were prepared and printed. The COC Record is presented in Attachment C.

## **8. Analytical Results**

Soil sample analytical results for the March/April sampling event indicated the presence of lead at concentrations that exceed the New Jersey Department of Environmental Protection's (NJDEP) Residential Direct Contact Soil Cleanup Criteria (RDCSCC) of 400 milligrams per kilogram (mg/kg) in 24 samples collected from 17 of the boreholes; these elevated concentrations range from 400 mg/kg to 1,600 mg/kg. The highest concentration was detected in a soil sample collected from soil boring P002-SS024. Antimony, arsenic, copper, manganese, thallium, vanadium, zinc, and mercury were also detected above their respective NJDEP RDCSCC in some of the samples.

Soil sample analytical results for the May sampling event indicated the presence of lead at concentrations that exceed the NJDEP's RDCSSC of 400 mg/kg in six samples collected from six of the boreholes; these elevated concentrations range from 420 mg/kg to 2,400 mg/kg. The highest concentration was detected in soil sample collected from soil boring P002-SS061. Antimony, arsenic, cadmium, copper, manganese, and zinc were also detected above their respective NJDEP RDCSCC in some of the samples. Average XRF field screening levels for lead that exceeded NJDEP's RDCSCC, ranged from 405 parts per million (ppm) to 2,330 ppm. The highest lead level was detected in a soil sample collected from boring P002-SS061.

Tin was detected in 132 samples collected during the March/April sampling event and all 14 samples submitted to the laboratory during the May sampling event. The NJDEP RDCCS criteria for tin as not been established. Refer to Attachment B, Table 3A and 3B for Target Analyte List Metals Data Summary.

For reference purposes of this report, Attachment A contains the Site Location Map (Figure 1), the Sample Location Map for March/April sampling event (Figure 2), and the Sample Location Map for May sampling event (Figure 3); Attachment B contains sample collection information (Table 1A and 1B), field screening data for lead (Table 2), and a target analyte list metals data summary table (Table 3A and 3B); and Attachment C contains the sample analytical results and the COC Record.

A regression analysis was performed to compare the XRF data to the analytical data. The regression graph depicts this comparison by showing the best-fit line, with a  $R^2$  value of 0.8045. Refer to Attachment D for regression analysis graph.

**8. Report Prepared by:** \_\_\_\_\_ Date: \_\_\_\_\_

Scott T. Snyder, CHMM  
RST 2 Site Project Manager/Group Leader

**Report Reviewed by:** \_\_\_\_\_ Date: \_\_\_\_\_

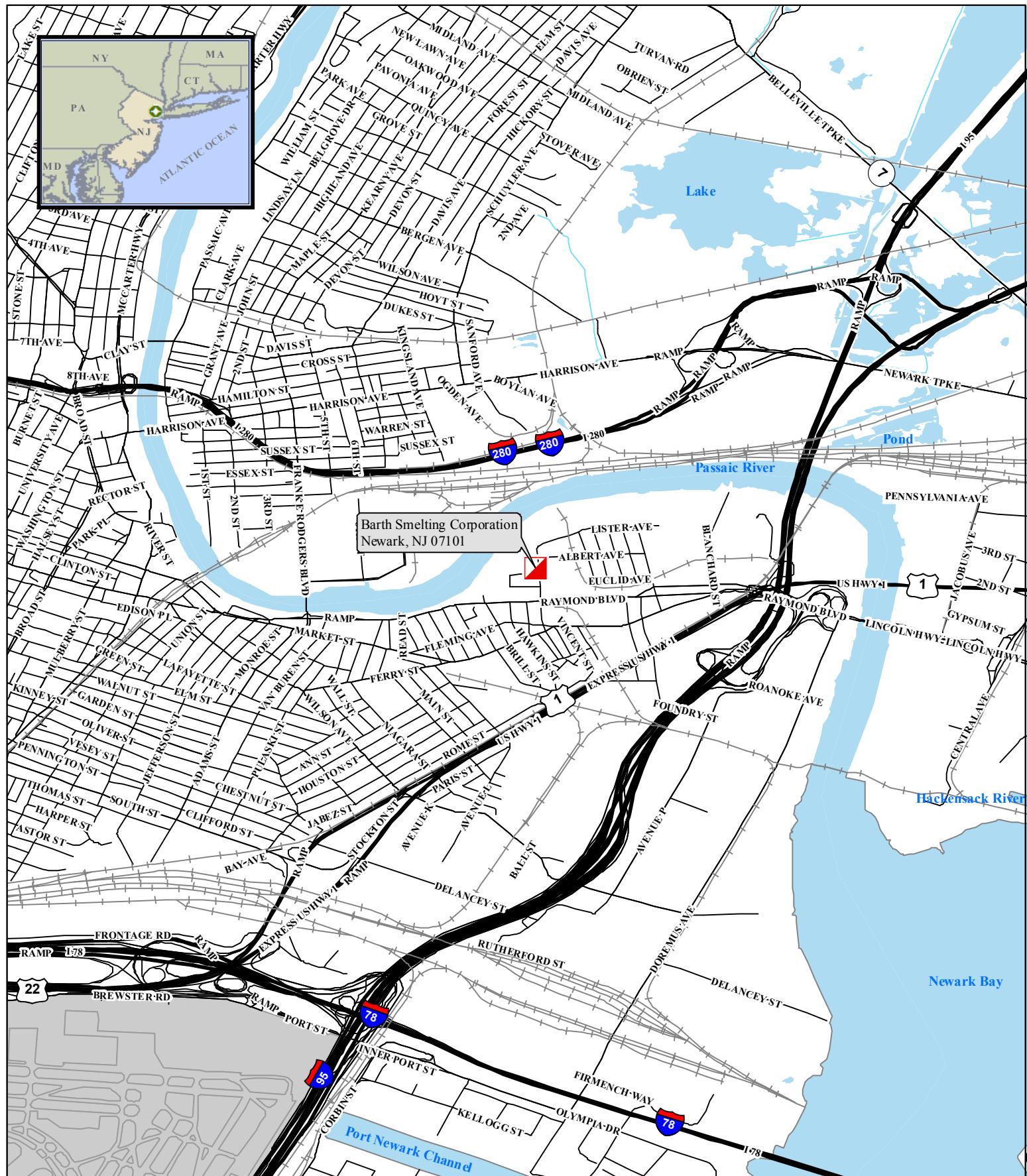
Joel Petty  
RST 2 Group Leader

## **ATTACHMENT A**

Figure 1: Site Location Map

Figure 2: Sample Location Map for March/ April 2013 Sampling Event

Figure 3: Sample Location Map for May 2013 Sampling Event



**Weston Solutions, Inc.**  
Northeast Division

In Association With  
H & S Environmental, Inc.,  
Scientific and Environmental Associates, Inc.  
and Avatar Environmental, LLC.

Figure 1 Site Location Map	
Barth Smelting Corporation Site Newark, New Jersey	
DATE MODIFIED:	12/6/2012
U.S. ENVIRONMENTAL PROTECTION AGENCY	REM OVAL SUPPORT TEAM 2
	CONTRACT # EP-W-06-072
GIS ANALYST:	T. BENTON
EPA OSC:	K. STAIGER
RST SPM:	S. SNYDER
FILENAME:	SITEMAP.MXD



SCALE  
1:480

LEGEND

Sample Location

PASSAIC RIVER

Analyte	Residential Direct Contact Soil Cleanup Criteria (RDCSCC) (mg/kg)
Aluminum	78,000
Antimony	31
Arsenic	19*
Barium	16,000
Beryllium	16
Cadmium	78
Calcium	Not Established
Chromium	Not Established
Cobalt	1,600
Copper	3,100
Iron	Not Established
Lead	400
Magnesium	Not Established
Manganese	11,000
Nickel	1,600**
Potassium	Not Established
Selenium	390
Silver	390
Sodium	Not Established
Thallium	5***
Tin	Not Established
Vanadium	78
Zinc	23,000
Mercury	23

\* Clean up standard proposal was based on natural background.

\*\* Soluble salts.

\*\*\* Health based criterion is lower than analytical limits; clean up criterion based on practical quantitation level.



NOTE(S):  
 \* ALL SAMPLE DEPTHS ARE DEPICTED IN INCHES AND ARE DISPLAYED IN PARENTHESIS  
 \*\* ALL LEAD RESULTS AND ONLY EXCEEDANCES OF THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION (NJDEP) RESIDENTIAL DIRECT CONTACT SOIL CLEANUP CRITERIA (RDCSCC) ARE DEPICTED  
 \*\*\* MG/KG - MILLIGRAM PER KILOGRAM

Figure 2: Sample Location Map for March/April 2013 Sampling Event

Barth Smelting Corporation Site  
Newark, New Jersey

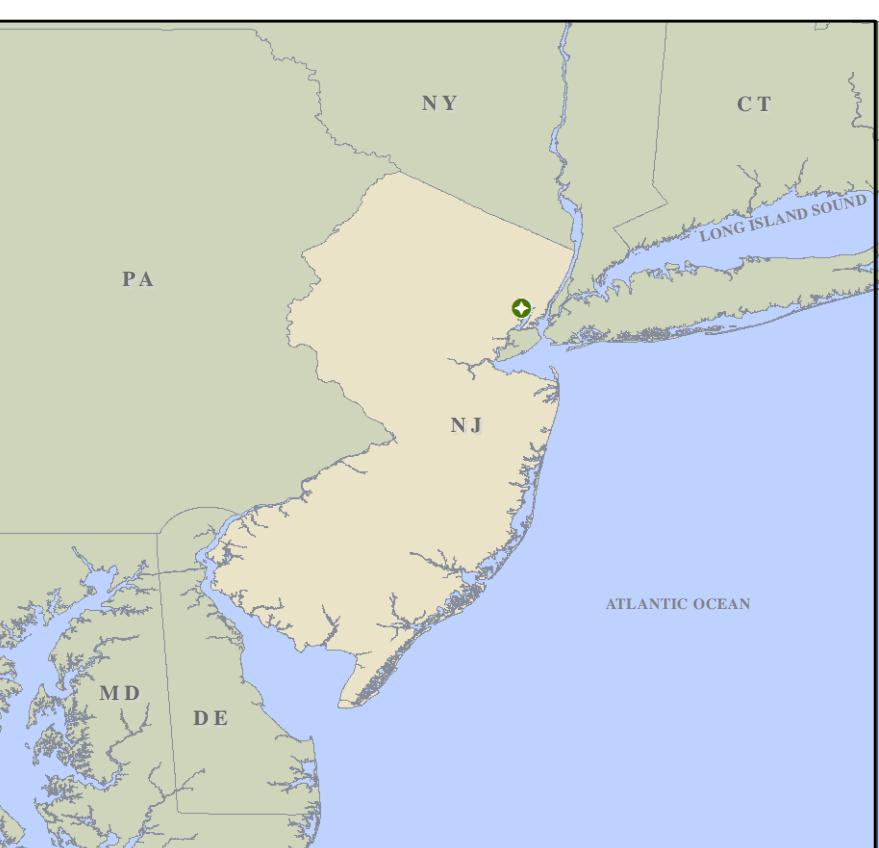
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REMOVAL SUPPORT TEAM 2  
CONTRACT # EP-W-06-072

Weston Solutions, Inc.  
Northeast Division

In Association With  
Avataq Environmental, LLC,  
Innovative Technological Solutions, Inc. &  
Scientific and Environmental Associates, Inc.

GIS ANALYST:	P. LISICHENKO
EPA OSC:	K. STAIGER
RST SPM:	S. SNYDER
FILENAME:	TerrillHomes_A_SMP.MXD
FIGURE:	2
REVISION:	0
DATE MODIFIED:	7/3/2013

WESTON  
SOLUTIONS



SCALE  
1:480

LEGEND  
■ Sample Location

PASSAIC RIVER



## **ATTACHMENT B**

Table 1A: Sample Collection Information – for March/April 2013 Sampling Event

Table 1B: Sample Collection Information – for May 2013 Sampling Event

Table 2: Field Screening Data for Lead - for May 2013 Sampling Event

Table 3A: Target Analyte List Metals Data Summary - for March/April 2013 Sampling Event

Table 3A: Target Analyte List Metals Data Summary - for May 2013 Sampling Event









**Table 2**  
**Field Screening Data for Lead**  
**Barth Smelting Corporation - Property P002 (Terrell Homes)**  
**May 2013**

Date	Location	Depth (in.)	Pb	Pb +/-	Average Pb
15-May-13	P002-SS037	00-01	138	6	133
15-May-13	P002-SS037	00-01	134	6	
15-May-13	P002-SS037	00-01	128	6	
15-May-13	P002-SS037	01-06	145	7	114
15-May-13	P002-SS037	01-06	109	6	
15-May-13	P002-SS037	01-06	87	5	
15-May-13	P002-SS037	06-12	89	5	87
15-May-13	P002-SS037	06-12	91	5	
15-May-13	P002-SS037	06-12	82	6	
15-May-13	P002-SS037	12-18	114	6	122
15-May-13	P002-SS037	12-18	104	6	
15-May-13	P002-SS037	12-18	148	7	
15-May-13	P002-SS037	18-24	148	7	149
15-May-13	P002-SS037	18-24	167	7	
15-May-13	P002-SS037	18-24	132	6	
15-May-13	P002-SS038	00-01	260	8	279
15-May-13	P002-SS038	00-01	269	8	
15-May-13	P002-SS038	00-01	308	9	
15-May-13	P002-SS038	01-06	195	7	341
15-May-13	P002-SS038	01-06	188	7	
15-May-13	P002-SS038	01-06	641	17	
15-May-13	P002-SS038	06-12	88	6	99
15-May-13	P002-SS038	06-12	108	6	
15-May-13	P002-SS038	06-12	101	6	
15-May-13	P002-SS038	12-18	186	9	189
15-May-13	P002-SS038	12-18	208	9	
15-May-13	P002-SS038	12-18	172	8	
15-May-13	P002-SS038	18-24	66	6	66
15-May-13	P002-SS038	18-24	63	6	
15-May-13	P002-SS038	18-24	68	6	
15-May-13	P002-SS039	00-01	156	6	175
15-May-13	P002-SS039	00-01	214	7	
15-May-13	P002-SS039	00-01	156	6	
15-May-13	P002-SS039	01-06	202	8	201
15-May-13	P002-SS039	01-06	217	9	
15-May-13	P002-SS039	01-06	183	8	
15-May-13	P002-SS039	06-12	237	9	233
15-May-13	P002-SS039	06-12	238	9	
15-May-13	P002-SS039	06-12	223	9	
15-May-13	P002-SS039	12-18	248	9	264
15-May-13	P002-SS039	12-18	271	10	
15-May-13	P002-SS039	12-18	273	10	

Pb = Lead

All results are in parts per million

Exceedances of NJDEP RDCSCC are highlighted in yellow.

**Table 2**  
**Field Screening Data for Lead**  
**Barth Smelting Corporation - Property P002 (Terrell Homes)**  
**May 2013**

Date	Location	Depth (in.)	Pb	Pb +/-	Average Pb
15-May-13	P002-SS039	18-24	152	8	161
15-May-13	P002-SS039	18-24	194	9	
15-May-13	P002-SS039	18-24	138	7	
15-May-13	P002-SS040	00-01	89	5	92
15-May-13	P002-SS040	00-01	90	5	
15-May-13	P002-SS040	00-01	97	5	
15-May-13	P002-SS040	01-06	84	5	80
15-May-13	P002-SS040	01-06	70	5	
15-May-13	P002-SS040	01-06	85	5	
15-May-13	P002-SS040	06-12	80	5	102
15-May-13	P002-SS040	06-12	113	6	
15-May-13	P002-SS040	06-12	112	6	
15-May-13	P002-SS040	12-18	237	10	226
15-May-13	P002-SS040	12-18	195	9	
15-May-13	P002-SS040	12-18	245	11	
15-May-13	P002-SS040	18-24	187	10	224
15-May-13	P002-SS040	18-24	217	10	
15-May-13	P002-SS040	18-24	269	11	
15-May-13	P002-SS041	00-01	274	8	260
15-May-13	P002-SS041	00-01	262	8	
15-May-13	P002-SS041	00-01	243	8	
15-May-13	P002-SS041	01-06	280	10	313
15-May-13	P002-SS041	01-06	234	9	
15-May-13	P002-SS041	01-06	425	11	
15-May-13	P002-SS041	06-12	190	9	162
15-May-13	P002-SS041	06-12	168	7	
15-May-13	P002-SS041	06-12	128	8	
15-May-13	P002-SS041	12-18	438	13	405
15-May-13	P002-SS041	12-18	379	12	
15-May-13	P002-SS041	12-18	399	12	
15-May-13	P002-SS041	18-24	123	8	126
15-May-13	P002-SS041	18-24	98	8	
15-May-13	P002-SS041	18-24	158	9	
15-May-13	P002-SS042	00-01	259	8	258
15-May-13	P002-SS042	00-01	263	8	
15-May-13	P002-SS042	00-01	253	8	
15-May-13	P002-SS042	01-06	1734	28	1728
15-May-13	P002-SS042	01-06	1836	29	
15-May-13	P002-SS042	01-06	1613	26	
15-May-13	P002-SS042	06-12	1564	25	1595
15-May-13	P002-SS042	06-12	1515	24	
15-May-13	P002-SS042	06-12	1706	27	

Pb = Lead

All results are in parts per million

Exceedances of NJDEP RDCSCC are highlighted in yellow.

**Table 2**  
**Field Screening Data for Lead**  
**Barth Smelting Corporation - Property P002 (Terrell Homes)**  
**May 2013**

Date	Location	Depth (in.)	Pb	Pb +/-	Average Pb
15-May-13	P002-SS042	12-18	394	11	222
15-May-13	P002-SS042	12-18	119	6	
15-May-13	P002-SS042	12-18	152	7	
15-May-13	P002-SS042	18-24	ND	8	120
15-May-13	P002-SS042	18-24	ND	8	
15-May-13	P002-SS042	18-24	478	34	
15-May-13	P002-SS042	18-24	ND	8	
15-May-13	P002-SS043	00-01	857	17	886
15-May-13	P002-SS043	00-01	1018	19	
15-May-13	P002-SS043	00-01	783	16	
15-May-13	P002-SS043	01-06	1551	28	1566
15-May-13	P002-SS043	01-06	1401	29	
15-May-13	P002-SS043	01-06	1747	30	
15-May-13	P002-SS043	06-12	369	11	372
15-May-13	P002-SS043	06-12	335	11	
15-May-13	P002-SS043	06-12	412	13	
15-May-13	P002-SS043	12-18	337	11	443
15-May-13	P002-SS043	12-18	539	15	
15-May-13	P002-SS043	12-18	453	14	
15-May-13	P002-SS043	18-24	319	15	320
15-May-13	P002-SS043	18-24	283	14	
15-May-13	P002-SS043	18-24	359	19	
15-May-13	P002-SS044	00-01	919	17	909
15-May-13	P002-SS044	00-01	919	17	
15-May-13	P002-SS044	00-01	899	16	
15-May-13	P002-SS044	00-01	900	17	
15-May-13	P002-SS044	01-06	1415	24	1505
15-May-13	P002-SS044	01-06	1499	29	
15-May-13	P002-SS044	01-06	1587	62	
15-May-13	P002-SS044	01-06	1519	25	
15-May-13	P002-SS044	06-12	198	8	238
15-May-13	P002-SS044	06-12	265	9	
15-May-13	P002-SS044	06-12	250	8	
15-May-13	P002-SS044	12-18	300	10	273
15-May-13	P002-SS044	12-18	274	10	
15-May-13	P002-SS044	12-18	245	9	
15-May-13	P002-SS044	18-24	ND	8	7
15-May-13	P002-SS044	18-24	9	3	
15-May-13	P002-SS044	18-24	11	3	
15-May-13	P002-SS045	00-01	155	7	149
15-May-13	P002-SS045	00-01	148	6	
15-May-13	P002-SS045	00-01	144	8	

Pb = Lead

All results are in parts per million

Exceedances of NJDEP RDCSCC are highlighted in yellow.

**Table 2**  
**Field Screening Data for Lead**  
**Barth Smelting Corporation - Property P002 (Terrell Homes)**  
**May 2013**

Date	Location	Depth (in.)	Pb	Pb +/-	Average Pb
15-May-13	P002-SS045	01-06	201	7	211
15-May-13	P002-SS045	01-06	255	8	
15-May-13	P002-SS045	01-06	178	7	
15-May-13	P002-SS045	06-12	175	7	244
15-May-13	P002-SS045	06-12	274	10	
15-May-13	P002-SS045	06-12	284	10	
15-May-13	P002-SS045	12-18	589	17	593
15-May-13	P002-SS045	12-18	500	15	
15-May-13	P002-SS045	12-18	689	19	
15-May-13	P002-SS045	18-24	422	13	430
15-May-13	P002-SS045	18-24	339	11	
15-May-13	P002-SS045	18-24	529	15	
15-May-13	P002-SS046	00-01	2230	36	2327
15-May-13	P002-SS046	00-01	2199	35	
15-May-13	P002-SS046	00-01	2553	40	
15-May-13	P002-SS046	01-06	350	12	338
15-May-13	P002-SS046	01-06	325	11	
15-May-13	P002-SS046	01-06	339	11	
15-May-13	P002-SS046	06-12	1292	27	1655
15-May-13	P002-SS046	06-12	1549	30	
15-May-13	P002-SS046	06-12	2123	38	
15-May-13	P002-SS046	12-18	1601	31	1714
15-May-13	P002-SS046	12-18	1708	32	
15-May-13	P002-SS046	12-18	1832	35	
15-May-13	P002-SS046	18-24	2265	40	2175
15-May-13	P002-SS046	18-24	1917	34	
15-May-13	P002-SS046	18-24	2342	42	
15-May-13	P002-SS047	00-01	1220	22	1372
15-May-13	P002-SS047	00-01	1470	25	
15-May-13	P002-SS047	00-01	1427	24	
15-May-13	P002-SS047	01-06	2289	36	2196
15-May-13	P002-SS047	01-06	2349	37	
15-May-13	P002-SS047	01-06	1950	31	
15-May-13	P002-SS047	06-12	329	10	306
15-May-13	P002-SS047	06-12	272	9	
15-May-13	P002-SS047	06-12	317	10	
15-May-13	P002-SS047	12-18	595	14	596
15-May-13	P002-SS047	12-18	503	13	
15-May-13	P002-SS047	12-18	690	16	
15-May-13	P002-SS047	18-24	298	10	332
15-May-13	P002-SS047	18-24	377	13	
15-May-13	P002-SS047	18-24	321	10	

Pb = Lead

All results are in parts per million

Exceedances of NJDEP RDCSCC are highlighted in yellow.

**Table 2**  
**Field Screening Data for Lead**  
**Barth Smelting Corporation - Property P002 (Terrell Homes)**  
**May 2013**

Date	Location	Depth (in.)	Pb	Pb +/-	Average Pb
15-May-13	P002-SS048	00-01	189	7	177
15-May-13	P002-SS048	00-01	171	7	
15-May-13	P002-SS048	00-01	170	7	
15-May-13	P002-SS048	01-06	89	5	89
15-May-13	P002-SS048	01-06	85	5	
15-May-13	P002-SS048	01-06	94	5	
15-May-13	P002-SS048	06-12	251	8	315
15-May-13	P002-SS048	06-12	320	10	
15-May-13	P002-SS048	06-12	374	11	
15-May-13	P002-SS048	12-18	33	4	30
15-May-13	P002-SS048	12-18	23	3	
15-May-13	P002-SS048	12-18	34	4	
15-May-13	P002-SS048	18-24	19	3	6
15-May-13	P002-SS048	18-24	ND	8	
15-May-13	P002-SS048	18-24	ND	9	
15-May-13	P002-SS049	00-01	477	14	478
15-May-13	P002-SS049	00-01	470	13	
15-May-13	P002-SS049	00-01	486	14	
15-May-13	P002-SS049	01-06	280	10	332
15-May-13	P002-SS049	01-06	359	11	
15-May-13	P002-SS049	01-06	358	11	
15-May-13	P002-SS049	06-12	416	13	370
15-May-13	P002-SS049	06-12	406	13	
15-May-13	P002-SS049	06-12	325	11	
15-May-13	P002-SS049	06-12	333	11	381
15-May-13	P002-SS049	12-18	370	12	
15-May-13	P002-SS049	12-18	400	12	
15-May-13	P002-SS049	12-18	373	12	
15-May-13	P002-SS049	18-24	212	9	193
15-May-13	P002-SS049	18-24	210	9	
15-May-13	P002-SS049	18-24	156	7	
15-May-13	P002-SS050	00-01	610	17	520
15-May-13	P002-SS050	00-01	415	16	
15-May-13	P002-SS050	00-01	534	18	
15-May-13	P002-SS050	01-06	749	16	727
15-May-13	P002-SS050	01-06	706	15	
15-May-13	P002-SS050	01-06	726	16	
15-May-13	P002-SS050	06-12	176	7	220
15-May-13	P002-SS050	06-12	263	9	
15-May-13	P002-SS050	06-12	222	8	

Pb = Lead

All results are in parts per million

Exceedances of NJDEP RDCSCC are highlighted in yellow.

**Table 2**  
**Field Screening Data for Lead**  
**Barth Smelting Corporation - Property P002 (Terrell Homes)**  
**May 2013**

Date	Location	Depth (in.)	Pb	Pb +/-	Average Pb
15-May-13	P002-SS050	12-18	229	8	223
15-May-13	P002-SS050	12-18	202	7	
15-May-13	P002-SS050	12-18	239	8	
15-May-13	P002-SS050	18-24	87	5	109
15-May-13	P002-SS050	18-24	93	5	
15-May-13	P002-SS050	18-24	95	5	
15-May-13	P002-SS050	18-24	161	32	
15-May-13	P002-SS051	00-01	153	6	158
15-May-13	P002-SS051	00-01	159	6	
15-May-13	P002-SS051	00-01	162	6	
15-May-13	P002-SS051	01-06	220	8	191
15-May-13	P002-SS051	01-06	159	7	
15-May-13	P002-SS051	01-06	194	8	
16-May-13	P002-SS052	00-01	180	7	172
16-May-13	P002-SS052	00-01	150	6	
16-May-13	P002-SS052	00-01	187	7	
16-May-13	P002-SS052	01-06	78	6	61
16-May-13	P002-SS052	01-06	52	5	
16-May-13	P002-SS052	01-06	52	5	
16-May-13	P002-SS052	06-12	133	8	134
16-May-13	P002-SS052	06-12	141	8	
16-May-13	P002-SS052	06-12	129	8	
16-May-13	P002-SS052	12-18	177	10	154
16-May-13	P002-SS052	12-18	145	8	
16-May-13	P002-SS052	12-18	140	8	
16-May-13	P002-SS052	18-24	794	20	553
16-May-13	P002-SS052	18-24	445	14	
16-May-13	P002-SS052	18-24	421	14	
16-May-13	P002-SS053	00-01	1100	24	645
16-May-13	P002-SS053	00-01	434	12	
16-May-13	P002-SS053	00-01	401	11	
16-May-13	P002-SS053	01-06	595	17	580
16-May-13	P002-SS053	01-06	517	15	
16-May-13	P002-SS053	01-06	627	17	
16-May-13	P002-SS053	06-12	969	22	956
16-May-13	P002-SS053	06-12	803	19	
16-May-13	P002-SS053	06-12	1095	24	
16-May-13	P002-SS053	12-18	839	19	651
16-May-13	P002-SS053	12-18	584	16	
16-May-13	P002-SS053	12-18	531	16	

Pb = Lead

All results are in parts per million

Exceedances of NJDEP RDCSCC are highlighted in yellow.

**Table 2**  
**Field Screening Data for Lead**  
**Barth Smelting Corporation - Property P002 (Terrell Homes)**  
**May 2013**

Date	Location	Depth (in.)	Pb	Pb +/-	Average Pb
16-May-13	P002-SS053	18-24	223	10	262
16-May-13	P002-SS053	18-24	371	13	
16-May-13	P002-SS053	18-24	192	9	
16-May-13	P002-SS054	00-01	1335	26	1351
16-May-13	P002-SS054	00-01	1340	26	
16-May-13	P002-SS054	00-01	1379	26	
16-May-13	P002-SS054	01-06	913	22	877
16-May-13	P002-SS054	01-06	964	22	
16-May-13	P002-SS054	01-06	755	19	
16-May-13	P002-SS054	06-12	694	18	730
16-May-13	P002-SS054	06-12	861	21	
16-May-13	P002-SS054	06-12	635	17	
16-May-13	P002-SS054	12-18	290	12	252
16-May-13	P002-SS054	12-18	275	12	
16-May-13	P002-SS054	12-18	192	9	
16-May-13	P002-SS054	18-24	375	13	398
16-May-13	P002-SS054	18-24	452	15	
16-May-13	P002-SS054	18-24	367	13	
16-May-13	P002-SS055	00-01	315	9	271
16-May-13	P002-SS055	00-01	178	7	
16-May-13	P002-SS055	00-01	320	10	
16-May-13	P002-SS055	01-06	231	9	258
16-May-13	P002-SS055	01-06	291	10	
16-May-13	P002-SS055	01-06	251	9	
16-May-13	P002-SS055	06-12	197	8	239
16-May-13	P002-SS055	06-12	268	10	
16-May-13	P002-SS055	06-12	253	9	
16-May-13	P002-SS055	12-18	205	9	214
16-May-13	P002-SS055	12-18	199	9	
16-May-13	P002-SS055	12-18	239	10	
16-May-13	P002-SS056	00-01	1050	23	1245
16-May-13	P002-SS056	00-01	1305	26	
16-May-13	P002-SS056	00-01	1380	27	
16-May-13	P002-SS056	01-06	369	15	350
16-May-13	P002-SS056	01-06	284	14	
16-May-13	P002-SS056	01-06	396	16	
16-May-13	P002-SS056	06-12	143	10	165
16-May-13	P002-SS056	06-12	159	10	
16-May-13	P002-SS056	06-12	192	10	
16-May-13	P002-SS056	12-18	203	10	206
16-May-13	P002-SS056	12-18	180	9	
16-May-13	P002-SS056	12-18	235	11	

Pb = Lead

All results are in parts per million

Exceedances of NJDEP RDCSCC are highlighted in yellow.

**Table 2**  
**Field Screening Data for Lead**  
**Barth Smelting Corporation - Property P002 (Terrell Homes)**  
**May 2013**

Date	Location	Depth (in.)	Pb	Pb +/-	Average Pb
16-May-13	P002-SS056	18-24	122	7	158
16-May-13	P002-SS056	18-24	185	9	
16-May-13	P002-SS056	18-24	167	9	
16-May-13	P002-SS057	00-01	171	7	197
16-May-13	P002-SS057	00-01	193	7	
16-May-13	P002-SS057	00-01	227	8	
16-May-13	P002-SS057	01-06	129	8	162
16-May-13	P002-SS057	01-06	213	10	
16-May-13	P002-SS057	01-06	143	8	
16-May-13	P002-SS057	06-12	103	7	91
16-May-13	P002-SS057	06-12	90	6	
16-May-13	P002-SS057	06-12	81	6	
16-May-13	P002-SS057	12-18	79	6	93
16-May-13	P002-SS057	12-18	94	6	
16-May-13	P002-SS057	12-18	107	6	
16-May-13	P002-SS057	18-24	16	3	20
16-May-13	P002-SS057	18-24	22	3	
16-May-13	P002-SS057	18-24	21	3	
16-May-13	P002-SS058	00-01	99	5	95
16-May-13	P002-SS058	00-01	91	5	
16-May-13	P002-SS058	01-06	350	13	
16-May-13	P002-SS058	01-06	361	12	356
16-May-13	P002-SS058	01-06	358	13	
16-May-13	P002-SS058	06-12	33	4	
16-May-13	P002-SS058	06-12	20	3	25
16-May-13	P002-SS058	06-12	22	4	
16-May-13	P002-SS058	12-18	43	4	
16-May-13	P002-SS058	12-18	59	5	56
16-May-13	P002-SS058	12-18	67	5	
16-May-13	P002-SS058	18-24	61	6	
16-May-13	P002-SS058	18-24	72	5	68
16-May-13	P002-SS058	18-24	70	5	
16-May-13	P002-SS059	00-01	322	10	327
16-May-13	P002-SS059	00-01	336	10	
16-May-13	P002-SS059	00-01	322	11	
16-May-13	P002-SS059	01-06	112	7	131
16-May-13	P002-SS059	01-06	150	8	
16-May-13	P002-SS059	01-06	132	7	
16-May-13	P002-SS059	06-12	140	8	145
16-May-13	P002-SS059	06-12	143	8	
16-May-13	P002-SS059	06-12	152	8	

Pb = Lead

All results are in parts per million

Exceedances of NJDEP RDCSCC are highlighted in yellow.

**Table 2**  
**Field Screening Data for Lead**  
**Barth Smelting Corporation - Property P002 (Terrell Homes)**  
**May 2013**

Date	Location	Depth (in.)	Pb	Pb +/-	Average Pb
16-May-13	P002-SS059	12-18	169	9	160
16-May-13	P002-SS059	12-18	171	9	
16-May-13	P002-SS059	12-18	139	9	
16-May-13	P002-SS060	00-01	253	8	247
16-May-13	P002-SS060	00-01	229	7	
16-May-13	P002-SS060	00-01	259	8	
16-May-13	P002-SS060	01-06	170	8	190
16-May-13	P002-SS060	01-06	201	8	
16-May-13	P002-SS060	01-06	200	8	
16-May-13	P002-SS060	06-12	127	8	126
16-May-13	P002-SS060	06-12	111	8	
16-May-13	P002-SS060	06-12	139	8	
16-May-13	P002-SS061	00-01	1032	21	1117
16-May-13	P002-SS061	00-01	1170	23	
16-May-13	P002-SS061	00-01	1148	22	
16-May-13	P002-SS061	01-06	1266	26	1035
16-May-13	P002-SS061	01-06	1151	23	
16-May-13	P002-SS061	01-06	687	16	
16-May-13	P002-SS061	06-12	2623	51	2330
16-May-13	P002-SS061	06-12	2171	42	
16-May-13	P002-SS061	06-12	2196	43	
16-May-13	P002-SS061	12-18	1244	31	1175
16-May-13	P002-SS061	12-18	1139	32	
16-May-13	P002-SS061	12-18	1142	30	
16-May-13	P002-SS061	18-24	1011	23	1013
16-May-13	P002-SS061	18-24	1033	24	
16-May-13	P002-SS061	18-24	995	24	
16-May-13	P002-SS062	00-01	500	12	528
16-May-13	P002-SS062	00-01	531	13	
16-May-13	P002-SS062	00-01	552	13	
16-May-13	P002-SS062	01-06	126	6	110
16-May-13	P002-SS062	01-06	64	5	
16-May-13	P002-SS062	01-06	140	6	
16-May-13	P002-SS062	06-12	731	16	713
16-May-13	P002-SS062	06-12	834	18	
16-May-13	P002-SS062	06-12	574	14	
16-May-13	P002-SS062	12-18	965	20	978
16-May-13	P002-SS062	12-18	710	16	
16-May-13	P002-SS062	12-18	1259	24	
16-May-13	P002-SS062	18-24	986	21	878
16-May-13	P002-SS062	18-24	765	18	
16-May-13	P002-SS062	18-24	883	19	

Pb = Lead

All results are in parts per million

Exceedances of NJDEP RDCSCC are highlighted in yellow.

**Table 2**  
**Field Screening Data for Lead**  
**Barth Smelting Corporation - Property P002 (Terrell Homes)**  
**May 2013**

Date	Location	Depth (in.)	Pb	Pb +/-	Average Pb
16-May-13	P002-SS063	00-01	283	9	279
16-May-13	P002-SS063	00-01	298	9	
16-May-13	P002-SS063	00-01	256	8	
16-May-13	P002-SS063	01-06	137	7	143
16-May-13	P002-SS063	01-06	149	7	
16-May-13	P002-SS063	06-12	115	6	121
16-May-13	P002-SS063	06-12	99	6	
16-May-13	P002-SS063	06-12	148	8	
16-May-13	P002-SS063	12-18	154	7	143
16-May-13	P002-SS063	12-18	121	7	
16-May-13	P002-SS063	12-18	153	8	
16-May-13	P002-SS063	18-24	115	6	106
16-May-13	P002-SS063	18-24	118	7	
16-May-13	P002-SS063	18-24	85	6	
16-May-13	P002-SS064	00-01	106	6	96
16-May-13	P002-SS064	00-01	92	5	
16-May-13	P002-SS064	00-01	89	5	
16-May-13	P002-SS064	01-06	206	8	206
16-May-13	P002-SS064	01-06	227	9	
16-May-13	P002-SS064	01-06	184	8	
16-May-13	P002-SS064	06-12	165	7	187
16-May-13	P002-SS064	06-12	198	8	
16-May-13	P002-SS064	06-12	197	8	
16-May-13	P002-SS064	12-18	136	7	121
16-May-13	P002-SS064	12-18	117	6	
16-May-13	P002-SS064	12-18	111	6	
16-May-13	P002-SS065	00-01	686	15	645
16-May-13	P002-SS065	00-01	586	13	
16-May-13	P002-SS065	00-01	663	15	
16-May-13	P002-SS065	01-06	302	9	260
16-May-13	P002-SS065	01-06	298	9	
16-May-13	P002-SS065	01-06	180	7	
16-May-13	P002-SS065	06-12	781	17	772
16-May-13	P002-SS065	06-12	739	16	
16-May-13	P002-SS065	06-12	795	16	
16-May-13	P002-SS065	12-18	487	13	494
16-May-13	P002-SS065	12-18	508	13	
16-May-13	P002-SS065	12-18	486	12	
16-May-13	P002-SS065	18-24	359	11	315
16-May-13	P002-SS065	18-24	248	9	
16-May-13	P002-SS065	18-24	339	10	

Pb = Lead

All results are in parts per million

Exceedances of NJDEP RDCSCC are highlighted in yellow.

**Table 2**  
**Field Screening Data for Lead**  
**Barth Smelting Corporation - Property P002 (Terrell Homes)**  
**May 2013**

Date	Location	Depth (in.)	Pb	Pb +/-	Average Pb
16-May-13	P002-SS066	00-01	606	13	580
16-May-13	P002-SS066	00-01	449	11	
16-May-13	P002-SS066	00-01	684	15	
16-May-13	P002-SS066	01-06	496	13	460
16-May-13	P002-SS066	01-06	414	12	
16-May-13	P002-SS066	01-06	471	14	
16-May-13	P002-SS066	06-12	351	11	371
16-May-13	P002-SS066	06-12	392	12	
16-May-13	P002-SS066	06-12	371	12	
16-May-13	P002-SS066	12-18	711	16	691
16-May-13	P002-SS066	12-18	670	16	
16-May-13	P002-SS066	12-18	692	17	
16-May-13	P002-SS066	18-24	379	12	328
16-May-13	P002-SS066	18-24	207	9	
16-May-13	P002-SS066	18-24	399	12	
16-May-13	P002-SS067	00-01	194	6	173
16-May-13	P002-SS067	00-01	161	6	
16-May-13	P002-SS067	00-01	165	6	
16-May-13	P002-SS067	01-06	215	7	239
16-May-13	P002-SS067	01-06	233	8	
16-May-13	P002-SS067	01-06	268	8	
16-May-13	P002-SS067	06-12	326	10	280
16-May-13	P002-SS067	06-12	250	9	
16-May-13	P002-SS067	06-12	265	10	
16-May-13	P002-SS067	12-18	188	8	157
16-May-13	P002-SS067	12-18	183	8	
16-May-13	P002-SS067	12-18	101	5	
16-May-13	P002-SS067	18-24	172	8	191
16-May-13	P002-SS067	18-24	177	8	
16-May-13	P002-SS067	18-24	224	9	
16-May-13	P002-SS068	00-01	283	8	290
16-May-13	P002-SS068	00-01	294	8	
16-May-13	P002-SS068	00-01	295	8	
16-May-13	P002-SS068	00-01	287	9	
16-May-13	P002-SS068	01-06	144	6	132
16-May-13	P002-SS068	01-06	122	6	
16-May-13	P002-SS068	01-06	130	6	
16-May-13	P002-SS068	06-12	268	9	261
16-May-13	P002-SS068	06-12	255	9	
16-May-13	P002-SS068	06-12	260	9	

Pb = Lead

All results are in parts per million

Exceedances of NJDEP RDCSCC are highlighted in yellow.

**Table 2**  
**Field Screening Data for Lead**  
**Barth Smelting Corporation - Property P002 (Terrell Homes)**  
**May 2013**

Date	Location	Depth (in.)	Pb	Pb +/-	Average Pb
16-May-13	P002-SS068	12-18	218	8	261
16-May-13	P002-SS068	12-18	305	10	
16-May-13	P002-SS068	12-18	261	9	
16-May-13	P002-SS068	18-24	243	9	201
16-May-13	P002-SS068	18-24	126	6	
16-May-13	P002-SS068	18-24	234	9	
16-May-13	P002-SS069	00-01	256	8	313
16-May-13	P002-SS069	00-01	383	12	
16-May-13	P002-SS069	00-01	299	10	
16-May-13	P002-SS070	00-01	216	8	219
16-May-13	P002-SS070	00-01	211	8	
16-May-13	P002-SS070	00-01	230	8	

Pb = Lead

All results are in parts per million

Exceedances of NJDEP RDCSCC are highlighted in yellow.

## **ATTACHMENT C**

Sample Analytical Results and Chain of Custody Record



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 2 Laboratory  
2890 Woodbridge Avenue  
Edison , New Jersey 08837  
732-906-6886 Phone  
732-906-6165 Fax

April 23, 2013

Smita Sumbaly  
Weston Solutions Inc.  
205 Campus Drive  
Edison, NJ 08837

RE: Barth Smelting Co.-1303109

Enclosed are the results of analyses for samples received by the laboratory on 03/27/2013. The signature below reflects the laboratory's approval of the reported results. If you have any questions concerning this report, please refer to Project Number 1303109 and contact John Birri by phone at 732-906-6886, or via Email at [birri.john@epa.gov](mailto:birri.john@epa.gov).

Sincerely,

John R. Bourbon  
Chief, DESA/LB



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory**

**Project:Barth Smelting Co.-1303109**

**Project Number: 1303109**

**Project Narrative:**

The National Environmental Laboratory Accreditation Conference Institute (TNI) is a voluntary environmental laboratory accreditation association of State and Federal agencies. TNI established and promoted a National Environmental Laboratory Accreditation Program (NELAP) that provides a uniform set of standards for the generation of environmental data that are of known and defensible quality. The EPA Region 2 Laboratory is NELAP accredited. The Laboratory tests that are accredited have met all the requirements established under the TNI Standards.

**Condition Comments**

None

**Comment(s):**

None

**Data Qualifier(s):**

- U- The analyte was not detected at or above the Reporting Limit.
- J- The identification of the analyte is acceptable; the reported value is an estimate.
- K- The identification of the analyte is acceptable; the reported value may be biased high.
- L- The identification of the analyte is acceptable; the reported value may be biased low.
- NJ- There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification. The reported value is an estimate.

**Reporting Limit(s):**

The Laboratory was able to achieve the appropriate limits for each analyte requested.



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**Region 2 Laboratory**

**Project:Barth Smelting Co.-1303109**

**Project Number: 1303109**

**SUMMARY REPORT FOR SAMPLES**

Field ID	Laboratory ID	Matrix	Date Sampled	Date Received
P001-SS001-0206-001	1303109-01	Solid	03/26/2013 09:10	03/27/2013 11:50
P001-SS001-0612-001	1303109-02	Solid	03/26/2013 09:12	03/27/2013 11:50
P001-SS001-1218-001	1303109-03	Solid	03/26/2013 09:15	03/27/2013 11:50
P001-SS001-1824-001	1303109-04	Solid	03/26/2013 09:20	03/27/2013 11:50
P001-SS001-1824-002	1303109-05	Solid	03/26/2013 09:20	03/27/2013 11:50
P001-SS002-0206-001	1303109-06	Solid	03/26/2013 09:45	03/27/2013 11:50
P001-SS002-0612-001	1303109-07	Solid	03/26/2013 09:47	03/27/2013 11:50
P001-SS002-1218-001	1303109-08	Solid	03/26/2013 09:50	03/27/2013 11:50
P001-SS002-1824-001	1303109-09	Solid	03/26/2013 09:52	03/27/2013 11:50
P001-SS003-0206-001	1303109-10	Solid	03/26/2013 10:05	03/27/2013 11:50
P001-SS003-0612-001	1303109-11	Solid	03/26/2013 10:07	03/27/2013 11:50
P001-SS003-1218-001	1303109-12	Solid	03/26/2013 10:10	03/27/2013 11:50
P001-SS003-1824-001	1303109-13	Solid	03/26/2013 10:12	03/27/2013 11:50
P001-SS004-0206-001	1303109-14	Solid	03/26/2013 10:25	03/27/2013 11:50
P001-SS004-0612-001	1303109-15	Solid	03/26/2013 10:28	03/27/2013 11:50
P001-SS004-1218-001	1303109-16	Solid	03/26/2013 10:35	03/27/2013 11:50
P001-SS004-1824-001	1303109-17	Solid	03/26/2013 10:40	03/27/2013 11:50
P001-SS005-0206-001	1303109-18	Solid	03/26/2013 11:00	03/27/2013 11:50
P001-SS005-0609-001	1303109-19	Solid	03/26/2013 11:05	03/27/2013 11:50
P001-SS005-1318-001	1303109-20	Solid	03/26/2013 11:08	03/27/2013 11:50
P001-SS005-1824-001	1303109-21	Solid	03/26/2013 11:12	03/27/2013 11:50
P001-SS006-0206-001	1303109-22	Solid	03/26/2013 11:30	03/27/2013 11:50
P001-SS006-0612-001	1303109-23	Solid	03/26/2013 11:35	03/27/2013 11:50
P001-SS006-1218-001	1303109-24	Solid	03/26/2013 11:40	03/27/2013 11:50
P001-SS006-1218-002	1303109-25	Solid	03/26/2013 11:40	03/27/2013 11:50
P001-SS007-1218-001	1303109-26	Solid	03/26/2013 12:10	03/27/2013 11:50
P001-SS007-1824-001	1303109-27	Solid	03/26/2013 12:15	03/27/2013 11:50
P001-SS008-0206-001	1303109-28	Solid	03/26/2013 13:00	03/27/2013 11:50
P001-SS008-2224-001	1303109-29	Solid	03/26/2013 13:05	03/27/2013 11:50



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project:Barth Smelting Co.-1303109**

**Project Number: 1303109**

**SUMMARY REPORT FOR SAMPLES**

Field ID	Laboratory ID	Matrix	Date Sampled	Date Received
P001-SS009-0206-001	1303109-30	Solid	03/26/2013 12:40	03/27/2013 11:50
P001-SS010-1824-001	1303109-31	Solid	03/26/2013 13:20	03/27/2013 11:50
P001-SS013-0206-001	1303109-32	Solid	03/26/2013 13:55	03/27/2013 11:50
P001-SS013-0612-001	1303109-33	Solid	03/26/2013 14:00	03/27/2013 11:50
P001-SS013-1218-001	1303109-34	Solid	03/26/2013 14:05	03/27/2013 11:50
P001-SS013-1824-001	1303109-35	Solid	03/26/2013 14:10	03/27/2013 11:50
P001-SS014-0206-001	1303109-36	Solid	03/26/2013 13:35	03/27/2013 11:50
P001-SS014-2124-001	1303109-37	Solid	03/26/2013 13:40	03/27/2013 11:50
P001-SS015-0001-001	1303109-38	Solid	03/26/2013 14:42	03/27/2013 11:50
P001-SS015-0106-001	1303109-39	Solid	03/26/2013 14:45	03/27/2013 11:50
P001-SS015-0612-001	1303109-40	Solid	03/26/2013 14:47	03/27/2013 11:50
P001-SS015-1218-001	1303109-41	Solid	03/26/2013 14:53	03/27/2013 11:50
P001-SS015-1824-001	1303109-42	Solid	03/26/2013 14:55	03/27/2013 11:50
RB-032613	1303109-43	Aqueous	03/26/2013 09:00	03/27/2013 11:50



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory**

**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

**SUMMARY REPORT FOR METHODS**

<b>Analysis</b>	<b>Method</b>	<b>Certification</b>	<b>Matrix</b>
Mercury	EPA 245.1 / SOP C-110 Rev2.3	NELAP	Aqueous
Mercury	EPA 245.1 / SOP C-110 Rev2.3	NELAP	Solid
E-Metals ICP TAL	EPA 200.7 / SOP C-109 Rev3.2	NELAP	Aqueous
E-Metals ICP TAL	EPA 200.7 / SOP C-109 Rev3.2	NELAP	Solid



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS001-0206-001

Sample ID: 1303109-01

**Metals ICP**

Aluminum	6200		50	mg/kg dry
Antimony	32		9.9	mg/kg dry
Arsenic	8.5		4.0	mg/kg dry
Barium	150		50	mg/kg dry
Beryllium	1.5		1.5	mg/kg dry
Cadmium	3.9		1.5	mg/kg dry
Calcium	6800		250	mg/kg dry
Chromium	41		2.5	mg/kg dry
Cobalt	10		9.9	mg/kg dry
Copper	12000		5.0	mg/kg dry
Iron	26000		25	mg/kg dry
Lead	2300		4.0	mg/kg dry
Magnesium	2800		250	mg/kg dry
Manganese	620		2.5	mg/kg dry
Nickel	200		9.9	mg/kg dry
Potassium	340		250	mg/kg dry
Selenium	---	U	9.9	mg/kg dry
Sodium	670		500	mg/kg dry
Silver	4.9		2.5	mg/kg dry
Thallium	---	U	9.9	mg/kg dry
Vanadium	140		9.9	mg/kg dry
Zinc	3600		9.9	mg/kg dry
Tin	670		5.0	mg/kg dry

**Mercury CVAA**

Mercury	---	U	0.036	mg/kg dry
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project:Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS001-0612-001

Sample ID: 1303109-02

**Metals ICP**

Aluminum	7500		46	mg/kg dry
Antimony	---	U	9.2	mg/kg dry
Arsenic	13		3.7	mg/kg dry
Barium	88		46	mg/kg dry
Beryllium	---	U	1.4	mg/kg dry
Cadmium	3.1		1.4	mg/kg dry
Calcium	19000		230	mg/kg dry
Chromium	11		2.3	mg/kg dry
Cobalt	12		9.2	mg/kg dry
Copper	1600		4.6	mg/kg dry
Iron	35000		23	mg/kg dry
Lead	560		3.7	mg/kg dry
Magnesium	9900		230	mg/kg dry
Manganese	6700		2.3	mg/kg dry
Nickel	34		9.2	mg/kg dry
Potassium	590		230	mg/kg dry
Selenium	---	U	9.2	mg/kg dry
Sodium	660		460	mg/kg dry
Silver	---	U	2.3	mg/kg dry
Thallium	---	U	9.2	mg/kg dry
Vanadium	84		9.2	mg/kg dry
Zinc	3400		9.2	mg/kg dry
Tin	36		4.6	mg/kg dry

**Mercury CVAA**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS001-0612-001

Sample ID: 1303109-02

**Mercury CVAA**

Mercury	0.15	0.034	mg/kg dry
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Field ID: P001-SS001-1218-001

Sample ID: 1303109-03

**Metals ICP**

Aluminum	9500	45	mg/kg dry	
Antimony	18	9.0	mg/kg dry	
Arsenic	35	3.6	mg/kg dry	
Barium	180	45	mg/kg dry	
Beryllium	3.0	1.3	mg/kg dry	
Cadmium	5.4	1.3	mg/kg dry	
Calcium	37000	220	mg/kg dry	
Chromium	26	2.2	mg/kg dry	
Cobalt	9.0	9.0	mg/kg dry	
Copper	3200	4.5	mg/kg dry	
Iron	61000	22	mg/kg dry	
Lead	1200	3.6	mg/kg dry	
Magnesium	18000	220	mg/kg dry	
Manganese	30000	11	mg/kg dry	
Nickel	69	9.0	mg/kg dry	
Potassium	670	220	mg/kg dry	
Selenium	21	9.0	mg/kg dry	
Sodium	540	450	mg/kg dry	
Silver	4.3	2.2	mg/kg dry	
Thallium	---	U	9.0	mg/kg dry
Vanadium	29	9.0	mg/kg dry	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS001-1218-001

Sample ID: 1303109-03

**Metals ICP**

Zinc	13000		9.0	mg/kg dry
Tin	70		4.5	mg/kg dry

**Mercury CVAA**

Mercury	0.080		0.036	mg/kg dry
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Field ID: P001-SS001-1824-001

Sample ID: 1303109-04

**Metals ICP**

Aluminum	8200		53	mg/kg dry
Antimony	22		11	mg/kg dry
Arsenic	53		4.2	mg/kg dry
Barium	610		53	mg/kg dry
Beryllium	1.9		1.6	mg/kg dry
Cadmium	7.0		1.6	mg/kg dry
Calcium	12000		260	mg/kg dry
Chromium	36		2.6	mg/kg dry
Cobalt	---	U	11	mg/kg dry
Copper	5600		5.3	mg/kg dry
Iron	54000		26	mg/kg dry
Lead	1400		4.2	mg/kg dry
Magnesium	3700		260	mg/kg dry
Manganese	16000		5.3	mg/kg dry
Nickel	73		11	mg/kg dry
Potassium	550		260	mg/kg dry
Selenium	---	U	11	mg/kg dry
Sodium	610		530	mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS001-1824-001

Sample ID: 1303109-04

**Metals ICP**

Silver	---	U	2.6	mg/kg dry
Thallium	---	U	11	mg/kg dry
Vanadium	30		11	mg/kg dry
Zinc	14000		11	mg/kg dry
Tin	190		5.3	mg/kg dry

**Mercury CVAA**

Mercury	0.50	0.037	mg/kg dry
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Field ID: P001-SS001-1824-002

Sample ID: 1303109-05

**Metals ICP**

Aluminum	8000	51	mg/kg dry
Antimony	26	10	mg/kg dry
Arsenic	72	4.1	mg/kg dry
Barium	730	51	mg/kg dry
Beryllium	1.7	1.5	mg/kg dry
Cadmium	6.6	1.5	mg/kg dry
Calcium	14000	260	mg/kg dry
Chromium	45	2.6	mg/kg dry
Cobalt	13	10	mg/kg dry
Copper	2200	5.1	mg/kg dry
Iron	100000	26	mg/kg dry
Lead	1500	4.1	mg/kg dry
Magnesium	4700	260	mg/kg dry
Manganese	19000	5.1	mg/kg dry
Nickel	72	10	mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS001-1824-002

Sample ID: 1303109-05

**Metals ICP**

Potassium	500		260	mg/kg dry
Selenium	---	U	10	mg/kg dry
Sodium	620		510	mg/kg dry
Silver	---	U	2.6	mg/kg dry
Thallium	---	U	10	mg/kg dry
Vanadium	44		10	mg/kg dry
Zinc	13000		10	mg/kg dry
Tin	150		5.1	mg/kg dry

**Mercury CVAA**

Mercury	0.53	0.038	mg/kg dry
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Field ID: P001-SS002-0206-001

Sample ID: 1303109-06

**Metals ICP**

Aluminum	8500		45	mg/kg dry
Antimony	---	U	8.9	mg/kg dry
Arsenic	---	U	3.6	mg/kg dry
Barium	---	U	45	mg/kg dry
Beryllium	---	U	1.3	mg/kg dry
Cadmium	---	U	1.3	mg/kg dry
Calcium	17000		220	mg/kg dry
Chromium	7.2		2.2	mg/kg dry
Cobalt	---	U	8.9	mg/kg dry
Copper	710		4.5	mg/kg dry
Iron	25000		22	mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS002-0206-001

Sample ID: 1303109-06

**Metals ICP**

Lead	210		3.6	mg/kg dry
Magnesium	8500		220	mg/kg dry
Manganese	340		2.2	mg/kg dry
Nickel	31		8.9	mg/kg dry
Potassium	450		220	mg/kg dry
Selenium	---	U	8.9	mg/kg dry
Sodium	1300		450	mg/kg dry
Silver	---	U	2.2	mg/kg dry
Thallium	---	U	8.9	mg/kg dry
Vanadium	150		8.9	mg/kg dry
Zinc	400		8.9	mg/kg dry
Tin	27		4.5	mg/kg dry

**Mercury CVAA**

Mercury	---	U	0.044	mg/kg dry
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Field ID: P001-SS002-0612-001

Sample ID: 1303109-07

**Metals ICP**

Aluminum	6700		40	mg/kg dry
Antimony	24		8.0	mg/kg dry
Arsenic	130		3.2	mg/kg dry
Barium	120		40	mg/kg dry
Beryllium	2.3		1.2	mg/kg dry
Cadmium	2.9		1.2	mg/kg dry
Calcium	11000		200	mg/kg dry
Chromium	13		2.0	mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS002-0612-001

Sample ID: 1303109-07

**Metals ICP**

Cobalt	12		8.0	mg/kg dry
Copper	190		4.0	mg/kg dry
Iron	150000		20	mg/kg dry
Lead	130		3.2	mg/kg dry
Magnesium	4200		200	mg/kg dry
Manganese	78000		20	mg/kg dry
Nickel	45		8.0	mg/kg dry
Potassium	510		200	mg/kg dry
Selenium	53		8.0	mg/kg dry
Sodium	670		400	mg/kg dry
Silver	9.0		2.0	mg/kg dry
Thallium	---	U	8.0	mg/kg dry
Vanadium	28		8.0	mg/kg dry
Zinc	37000		16	mg/kg dry
Tin	8.5		4.0	mg/kg dry

**Mercury CVAA**

Mercury	0.29	0.041	mg/kg dry
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Field ID: P001-SS002-1218-001

Sample ID: 1303109-08

**Metals ICP**

Aluminum	13000	44	mg/kg dry
Antimony	10	8.8	mg/kg dry
Arsenic	41	3.5	mg/kg dry
Barium	110	44	mg/kg dry
Beryllium	2.4	1.3	mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS002-1218-001

Sample ID: 1303109-08

**Metals ICP**

Cadmium	2.3		1.3	mg/kg dry
Calcium	16000		220	mg/kg dry
Chromium	18		2.2	mg/kg dry
Cobalt	---	U	8.8	mg/kg dry
Copper	73		4.4	mg/kg dry
Iron	47000		22	mg/kg dry
Lead	160		3.5	mg/kg dry
Magnesium	4200		220	mg/kg dry
Manganese	18000		4.4	mg/kg dry
Nickel	21		8.8	mg/kg dry
Potassium	750		220	mg/kg dry
Selenium	14		8.8	mg/kg dry
Sodium	910		440	mg/kg dry
Silver	2.7		2.2	mg/kg dry
Thallium	---	U	8.8	mg/kg dry
Vanadium	24		8.8	mg/kg dry
Zinc	24000		8.8	mg/kg dry
Tin	8.3		4.4	mg/kg dry

**Mercury CVAA**

Mercury	---	U	0.047	mg/kg dry
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Field ID: P001-SS002-1824-001

Sample ID: 1303109-09

**Metals ICP**

Aluminum	11000		46	mg/kg dry
Antimony	---	U	9.3	mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS002-1824-001

Sample ID: 1303109-09

**Metals ICP**

Arsenic	54		3.7	mg/kg dry
Barium	110		46	mg/kg dry
Beryllium	---	U	1.4	mg/kg dry
Cadmium	---	U	1.4	mg/kg dry
Calcium	13000		230	mg/kg dry
Chromium	18		2.3	mg/kg dry
Cobalt	---	U	9.3	mg/kg dry
Copper	88		4.6	mg/kg dry
Iron	37000		23	mg/kg dry
Lead	64		3.7	mg/kg dry
Magnesium	3400		230	mg/kg dry
Manganese	8200		2.3	mg/kg dry
Nickel	16		9.3	mg/kg dry
Potassium	630		230	mg/kg dry
Selenium	---	U	9.3	mg/kg dry
Sodium	980		460	mg/kg dry
Silver	---	U	2.3	mg/kg dry
Thallium	---	U	9.3	mg/kg dry
Vanadium	24		9.3	mg/kg dry
Zinc	13000		9.3	mg/kg dry
Tin	7.9		4.6	mg/kg dry

**Mercury CVAA**

Mercury	0.13	0.045	mg/kg dry
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project:Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS003-0206-001

Sample ID: 1303109-10

**Metals ICP**

Aluminum	8800		49	mg/kg dry
Antimony	---	U	9.7	mg/kg dry
Arsenic	65		3.9	mg/kg dry
Barium	130		49	mg/kg dry
Beryllium	---	U	1.5	mg/kg dry
Cadmium	2.2		1.5	mg/kg dry
Calcium	41000		240	mg/kg dry
Chromium	21		2.4	mg/kg dry
Cobalt	14		9.7	mg/kg dry
Copper	1700		4.9	mg/kg dry
Iron	75000		24	mg/kg dry
Lead	150		3.9	mg/kg dry
Magnesium	15000		240	mg/kg dry
Manganese	16000		4.9	mg/kg dry
Nickel	62		9.7	mg/kg dry
Potassium	1300		240	mg/kg dry
Selenium	---	U	9.7	mg/kg dry
Sodium	990		490	mg/kg dry
Silver	---	U	2.4	mg/kg dry
Thallium	---	U	9.7	mg/kg dry
Vanadium	69		9.7	mg/kg dry
Zinc	12000		9.7	mg/kg dry
Tin	130		4.9	mg/kg dry

**Mercury CVAA**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project:Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS003-0206-001

Sample ID: 1303109-10

**Mercury CVAA**

Mercury	0.070	0.038	mg/kg dry
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Field ID: P001-SS003-0612-001

Sample ID: 1303109-11

**Metals ICP**

Aluminum	5900	45	mg/kg dry	
Antimony	35	9.0	mg/kg dry	
Arsenic	150	3.6	mg/kg dry	
Barium	300	45	mg/kg dry	
Beryllium	2.7	1.3	mg/kg dry	
Cadmium	3.9	1.3	mg/kg dry	
Calcium	42000	220	mg/kg dry	
Chromium	34	2.2	mg/kg dry	
Cobalt	10	9.0	mg/kg dry	
Copper	590	4.5	mg/kg dry	
Iron	110000	22	mg/kg dry	
Lead	270	3.6	mg/kg dry	
Magnesium	18000	220	mg/kg dry	
Manganese	38000	11	mg/kg dry	
Nickel	45	9.0	mg/kg dry	
Potassium	470	220	mg/kg dry	
Selenium	27	9.0	mg/kg dry	
Sodium	630	450	mg/kg dry	
Silver	5.0	2.2	mg/kg dry	
Thallium	---	U	9.0	mg/kg dry
Vanadium	28	9.0	mg/kg dry	



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS003-0612-001

Sample ID: 1303109-11

**Metals ICP**

Zinc	31000	9.0	mg/kg dry
Tin	43	4.5	mg/kg dry

**Mercury CVAA**

Mercury	0.16	0.039	mg/kg dry
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Field ID: P001-SS003-1218-001

Sample ID: 1303109-12

**Metals ICP**

Aluminum	7500	45	mg/kg dry
Antimony	25	9.0	mg/kg dry
Arsenic	140	3.6	mg/kg dry
Barium	300	45	mg/kg dry
Beryllium	2.7	1.3	mg/kg dry
Cadmium	3.0	1.3	mg/kg dry
Calcium	13000	220	mg/kg dry
Chromium	91	2.2	mg/kg dry
Cobalt	16	9.0	mg/kg dry
Copper	810	4.5	mg/kg dry
Iron	110000	22	mg/kg dry
Lead	350	3.6	mg/kg dry
Magnesium	2600	220	mg/kg dry
Manganese	35000	11	mg/kg dry
Nickel	120	9.0	mg/kg dry
Potassium	630	220	mg/kg dry
Selenium	24	9.0	mg/kg dry
Sodium	630	450	mg/kg dry



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**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS003-1218-001

Sample ID: 1303109-12

**Metals ICP**

Silver	4.7		2.2	mg/kg dry
Thallium	---	U	9.0	mg/kg dry
Vanadium	37		9.0	mg/kg dry
Zinc	24000		9.0	mg/kg dry
Tin	32		4.5	mg/kg dry

**Mercury CVAA**

Mercury	0.19	0.047	mg/kg dry
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Field ID: P001-SS003-1824-001

Sample ID: 1303109-13

**Metals ICP**

Aluminum	6400	41	mg/kg dry
Antimony	28	8.1	mg/kg dry
Arsenic	350	3.2	mg/kg dry
Barium	270	41	mg/kg dry
Beryllium	6.0	1.2	mg/kg dry
Cadmium	4.8	1.2	mg/kg dry
Calcium	41000	200	mg/kg dry
Chromium	12	2.0	mg/kg dry
Cobalt	12	8.1	mg/kg dry
Copper	30	4.1	mg/kg dry
Iron	170000	20	mg/kg dry
Lead	51	3.2	mg/kg dry
Magnesium	8100	200	mg/kg dry
Manganese	99000	41	mg/kg dry
Nickel	46	8.1	mg/kg dry



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**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS003-1824-001

Sample ID: 1303109-13

**Metals ICP**

Potassium	920		200	mg/kg dry
Selenium	64		8.1	mg/kg dry
Sodium	710		410	mg/kg dry
Silver	12		2.0	mg/kg dry
Thallium	---	U	8.1	mg/kg dry
Vanadium	24		8.1	mg/kg dry
Zinc	77000		41	mg/kg dry
Tin	---	U	4.1	mg/kg dry

**Mercury CVAA**

Mercury	---	U	0.029	mg/kg dry
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Field ID: P001-SS004-0206-001

Sample ID: 1303109-14

**Metals ICP**

Aluminum	12000		49	mg/kg dry
Antimony	---	U	9.8	mg/kg dry
Arsenic	6.7		3.9	mg/kg dry
Barium	59		49	mg/kg dry
Beryllium	---	U	1.5	mg/kg dry
Cadmium	6.1		1.5	mg/kg dry
Calcium	16000		240	mg/kg dry
Chromium	33		2.4	mg/kg dry
Cobalt	---	U	9.8	mg/kg dry
Copper	2000		4.9	mg/kg dry
Iron	33000		24	mg/kg dry



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**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS004-0206-001

Sample ID: 1303109-14

**Metals ICP**

Lead	650		3.9	mg/kg dry
Magnesium	7300		240	mg/kg dry
Manganese	2600		2.4	mg/kg dry
Nickel	60		9.8	mg/kg dry
Potassium	600		240	mg/kg dry
Selenium	---	U	9.8	mg/kg dry
Sodium	1700		490	mg/kg dry
Silver	---	U	2.4	mg/kg dry
Thallium	---	U	9.8	mg/kg dry
Vanadium	85		9.8	mg/kg dry
Zinc	6600		9.8	mg/kg dry
Tin	130		4.9	mg/kg dry

**Mercury CVAA**

Mercury	0.13		0.034	mg/kg dry
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Field ID: P001-SS004-0612-001

Sample ID: 1303109-15

**Metals ICP**

Aluminum	16000		43	mg/kg dry
Antimony	---	U	8.5	mg/kg dry
Arsenic	6.5		3.4	mg/kg dry
Barium	98		43	mg/kg dry
Beryllium	1.3		1.3	mg/kg dry
Cadmium	13		1.3	mg/kg dry
Calcium	26000		210	mg/kg dry
Chromium	28		2.1	mg/kg dry



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**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS004-0612-001

Sample ID: 1303109-15

**Metals ICP**

Cobalt	8.9		8.5	mg/kg dry
Copper	3900		4.3	mg/kg dry
Iron	24000		21	mg/kg dry
Lead	1500		3.4	mg/kg dry
Magnesium	6900		210	mg/kg dry
Manganese	380		2.1	mg/kg dry
Nickel	79		8.5	mg/kg dry
Potassium	720		210	mg/kg dry
Selenium	---	U	8.5	mg/kg dry
Sodium	2800		430	mg/kg dry
Silver	---	U	2.1	mg/kg dry
Thallium	---	U	8.5	mg/kg dry
Vanadium	45		8.5	mg/kg dry
Zinc	9900		8.5	mg/kg dry
Tin	260		4.3	mg/kg dry

**Mercury CVAA**

Mercury	0.34	0.038	mg/kg dry
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Field ID: P001-SS004-1218-001

Sample ID: 1303109-16

**Metals ICP**

Aluminum	12000		48	mg/kg dry
Antimony	---	U	9.6	mg/kg dry
Arsenic	8.0		3.8	mg/kg dry
Barium	200		48	mg/kg dry
Beryllium	---	U	1.4	mg/kg dry



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Region 2 Laboratory

**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS004-1218-001

Sample ID: 1303109-16

**Metals ICP**

Cadmium	9.5		1.4	mg/kg dry
Calcium	31000		240	mg/kg dry
Chromium	31		2.4	mg/kg dry
Cobalt	---	U	9.6	mg/kg dry
Copper	2400		4.8	mg/kg dry
Iron	17000		24	mg/kg dry
Lead	1100		3.8	mg/kg dry
Magnesium	3100		240	mg/kg dry
Manganese	280		2.4	mg/kg dry
Nickel	42		9.6	mg/kg dry
Potassium	1200		240	mg/kg dry
Selenium	---	U	9.6	mg/kg dry
Sodium	2800		480	mg/kg dry
Silver	---	U	2.4	mg/kg dry
Thallium	---	U	9.6	mg/kg dry
Vanadium	30		9.6	mg/kg dry
Zinc	7300		9.6	mg/kg dry
Tin	170		4.8	mg/kg dry

**Mercury CVAA**

Mercury	0.29		0.047	mg/kg dry
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Field ID: P001-SS004-1824-001

Sample ID: 1303109-17

**Metals ICP**

Aluminum	11000		45	mg/kg dry
Antimony	---	U	9.0	mg/kg dry



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**Project:Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS004-1824-001

Sample ID: 1303109-17

**Metals ICP**

Arsenic	11		3.6	mg/kg dry
Barium	59		45	mg/kg dry
Beryllium	1.4		1.4	mg/kg dry
Cadmium	57		1.4	mg/kg dry
Calcium	41000		230	mg/kg dry
Chromium	17		2.3	mg/kg dry
Cobalt	---	U	9.0	mg/kg dry
Copper	1800		4.5	mg/kg dry
Iron	33000		23	mg/kg dry
Lead	2800		3.6	mg/kg dry
Magnesium	7100		230	mg/kg dry
Manganese	350		2.3	mg/kg dry
Nickel	34		9.0	mg/kg dry
Potassium	820		230	mg/kg dry
Selenium	---	U	9.0	mg/kg dry
Sodium	2100		450	mg/kg dry
Silver	2.4		2.3	mg/kg dry
Thallium	---	U	9.0	mg/kg dry
Vanadium	33		9.0	mg/kg dry
Zinc	27000		9.0	mg/kg dry
Tin	380		4.5	mg/kg dry

**Mercury CVAA**

Mercury	0.97	0.040	mg/kg dry
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Field ID: P001-SS005-0206-001

Sample ID: 1303109-18



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project:Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS005-0206-001

Sample ID: 1303109-18

**Metals ICP**

Aluminum	12000		48	mg/kg dry
Antimony	---	U	9.7	mg/kg dry
Arsenic	---	U	3.9	mg/kg dry
Barium	59		48	mg/kg dry
Beryllium	---	U	1.5	mg/kg dry
Cadmium	---	U	1.5	mg/kg dry
Calcium	21000		240	mg/kg dry
Chromium	24		2.4	mg/kg dry
Cobalt	12		9.7	mg/kg dry
Copper	160		4.8	mg/kg dry
Iron	29000		24	mg/kg dry
Lead	45		3.9	mg/kg dry
Magnesium	12000		240	mg/kg dry
Manganese	430		2.4	mg/kg dry
Nickel	26		9.7	mg/kg dry
Potassium	1200		240	mg/kg dry
Selenium	---	U	9.7	mg/kg dry
Sodium	710		480	mg/kg dry
Silver	---	U	2.4	mg/kg dry
Thallium	---	U	9.7	mg/kg dry
Vanadium	100		9.7	mg/kg dry
Zinc	380		9.7	mg/kg dry
Tin	5.6		4.8	mg/kg dry

**Mercury CVAA**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS005-0206-001

Sample ID: 1303109-18

**Mercury CVAA**

Mercury	---	U	0.040	mg/kg dry
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Field ID: P001-SS005-0609-001

Sample ID: 1303109-19

**Metals ICP**

Aluminum	12000		43	mg/kg dry
Antimony	---	U	8.6	mg/kg dry
Arsenic	---	U	3.5	mg/kg dry
Barium	---	U	43	mg/kg dry
Beryllium	---	U	1.3	mg/kg dry
Cadmium	---	U	1.3	mg/kg dry
Calcium	21000		220	mg/kg dry
Chromium	18		2.2	mg/kg dry
Cobalt	12		8.6	mg/kg dry
Copper	67		4.3	mg/kg dry
Iron	26000		22	mg/kg dry
Lead	13		3.5	mg/kg dry
Magnesium	14000		220	mg/kg dry
Manganese	350		2.2	mg/kg dry
Nickel	24		8.6	mg/kg dry
Potassium	880		220	mg/kg dry
Selenium	---	U	8.6	mg/kg dry
Sodium	500		430	mg/kg dry
Silver	---	U	2.2	mg/kg dry
Thallium	---	U	8.6	mg/kg dry



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**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS005-0609-001

Sample ID: 1303109-19

**Metals ICP**

Vanadium	89		8.6	mg/kg dry
Zinc	97		8.6	mg/kg dry
Tin	---	U	4.3	mg/kg dry

**Mercury CVAA**

Mercury	---	U	0.032	mg/kg dry
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Field ID: P001-SS005-1318-001

Sample ID: 1303109-20

**Metals ICP**

Aluminum	7900		41	mg/kg dry
Antimony	20		8.2	mg/kg dry
Arsenic	100		3.3	mg/kg dry
Barium	280		41	mg/kg dry
Beryllium	2.8		1.2	mg/kg dry
Cadmium	6.2		1.2	mg/kg dry
Calcium	44000		210	mg/kg dry
Chromium	18		2.1	mg/kg dry
Cobalt	8.8		8.2	mg/kg dry
Copper	150		4.1	mg/kg dry
Iron	100000		21	mg/kg dry
Lead	360		3.3	mg/kg dry
Magnesium	16000		210	mg/kg dry
Manganese	52000		10	mg/kg dry
Nickel	42		8.2	mg/kg dry
Potassium	690		210	mg/kg dry
Selenium	37		8.2	mg/kg dry



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Region 2 Laboratory

**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS005-1318-001

Sample ID: 1303109-20

**Metals ICP**

Sodium	---	U	410	mg/kg dry
Silver	6.8		2.1	mg/kg dry
Thallium	---	U	8.2	mg/kg dry
Vanadium	26		8.2	mg/kg dry
Zinc	22000		8.2	mg/kg dry
Tin	15		4.1	mg/kg dry

**Mercury CVAA**

Mercury	0.24	0.034	mg/kg dry
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Field ID: P001-SS005-1824-001

Sample ID: 1303109-21

**Metals ICP**

Aluminum	7400	46	mg/kg dry
Antimony	47	9.3	mg/kg dry
Arsenic	110	3.7	mg/kg dry
Barium	160	46	mg/kg dry
Beryllium	2.8	1.4	mg/kg dry
Cadmium	2.6	1.4	mg/kg dry
Calcium	15000	230	mg/kg dry
Chromium	15	2.3	mg/kg dry
Cobalt	12	9.3	mg/kg dry
Copper	45	4.6	mg/kg dry
Iron	150000	23	mg/kg dry
Lead	78	3.7	mg/kg dry
Magnesium	4100	230	mg/kg dry
Manganese	71000	23	mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS005-1824-001

Sample ID: 1303109-21

**Metals ICP**

Nickel	42		9.3	mg/kg dry
Potassium	480		230	mg/kg dry
Selenium	50		9.3	mg/kg dry
Sodium	---	U	460	mg/kg dry
Silver	8.5		2.3	mg/kg dry
Thallium	---	U	9.3	mg/kg dry
Vanadium	25		9.3	mg/kg dry
Zinc	32000		9.3	mg/kg dry
Tin	---	U	4.6	mg/kg dry

**Mercury CVAA**

Mercury	0.090		0.040	mg/kg dry
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Field ID: P001-SS006-0206-001

Sample ID: 1303109-22

**Metals ICP**

Aluminum	8500		43	mg/kg dry
Antimony	---	U	8.6	mg/kg dry
Arsenic	3.7		3.4	mg/kg dry
Barium	84		43	mg/kg dry
Beryllium	---	U	1.3	mg/kg dry
Cadmium	---	U	1.3	mg/kg dry
Calcium	44000		210	mg/kg dry
Chromium	32		2.1	mg/kg dry
Cobalt	---	U	8.6	mg/kg dry
Copper	850		4.3	mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
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**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS006-0206-001

Sample ID: 1303109-22

**Metals ICP**

Iron	31000		21	mg/kg dry
Lead	260		3.4	mg/kg dry
Magnesium	19000		210	mg/kg dry
Manganese	470		2.1	mg/kg dry
Nickel	29		8.6	mg/kg dry
Potassium	940		210	mg/kg dry
Selenium	---	U	8.6	mg/kg dry
Sodium	570		430	mg/kg dry
Silver	---	U	2.1	mg/kg dry
Thallium	---	U	8.6	mg/kg dry
Vanadium	58		8.6	mg/kg dry
Zinc	960		8.6	mg/kg dry
Tin	28		4.3	mg/kg dry

**Mercury CVAA**

Mercury	0.035	0.035	mg/kg dry
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Field ID: P001-SS006-0612-001

Sample ID: 1303109-23

**Metals ICP**

Aluminum	8500	43	mg/kg dry
Antimony	20	8.6	mg/kg dry
Arsenic	11	3.4	mg/kg dry
Barium	250	43	mg/kg dry
Beryllium	1.7	1.3	mg/kg dry
Cadmium	18	1.3	mg/kg dry
Calcium	41000	210	mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
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**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS006-0612-001

Sample ID: 1303109-23

**Metals ICP**

Chromium	100		2.1	mg/kg dry
Cobalt	---	U	8.6	mg/kg dry
Copper	9100		4.3	mg/kg dry
Iron	21000		21	mg/kg dry
Lead	2700		3.4	mg/kg dry
Magnesium	16000		210	mg/kg dry
Manganese	810		2.1	mg/kg dry
Nickel	810		8.6	mg/kg dry
Potassium	450		210	mg/kg dry
Selenium	---	U	8.6	mg/kg dry
Sodium	---	U	430	mg/kg dry
Silver	3.2		2.1	mg/kg dry
Thallium	---	U	8.6	mg/kg dry
Vanadium	32		8.6	mg/kg dry
Zinc	8900		8.6	mg/kg dry
Tin	780		4.3	mg/kg dry

**Mercury CVAA**

Mercury	0.88	0.074	mg/kg dry
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Field ID: P001-SS006-1218-001

Sample ID: 1303109-24

**Metals ICP**

Aluminum	9400	44	mg/kg dry
Antimony	110	8.8	mg/kg dry
Arsenic	17	3.5	mg/kg dry
Barium	330	44	mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS006-1218-001

Sample ID: 1303109-24

**Metals ICP**

Beryllium	7.3		1.3	mg/kg dry
Cadmium	48		1.3	mg/kg dry
Calcium	46000		220	mg/kg dry
Chromium	79		2.2	mg/kg dry
Cobalt	11		8.8	mg/kg dry
Copper	20000		4.4	mg/kg dry
Iron	42000		22	mg/kg dry
Lead	11000		3.5	mg/kg dry
Magnesium	4900		220	mg/kg dry
Manganese	3700		2.2	mg/kg dry
Nickel	440		8.8	mg/kg dry
Potassium	510		220	mg/kg dry
Selenium	---	U	8.8	mg/kg dry
Sodium	530		440	mg/kg dry
Silver	9.6		2.2	mg/kg dry
Thallium	---	U L	8.8	mg/kg dry
Vanadium	38		8.8	mg/kg dry
Zinc	37000		18	mg/kg dry
Tin	800		4.4	mg/kg dry

**Mercury CVAA**

Mercury	1.2	0.16	mg/kg dry
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Field ID: P001-SS006-1218-002

Sample ID: 1303109-25

**Metals ICP**

Aluminum	9500	42	mg/kg dry
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project:Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS006-1218-002

Sample ID: 1303109-25

**Metals ICP**

Antimony	32		8.4	mg/kg dry
Arsenic	15		3.4	mg/kg dry
Barium	320		42	mg/kg dry
Beryllium	4.3		1.3	mg/kg dry
Cadmium	35		1.3	mg/kg dry
Calcium	45000		210	mg/kg dry
Chromium	67		2.1	mg/kg dry
Cobalt	10		8.4	mg/kg dry
Copper	16000		4.2	mg/kg dry
Iron	45000		21	mg/kg dry
Lead	5800		3.4	mg/kg dry
Magnesium	4300		210	mg/kg dry
Manganese	1600		2.1	mg/kg dry
Nickel	540		8.4	mg/kg dry
Potassium	480		210	mg/kg dry
Selenium	---	U	8.4	mg/kg dry
Sodium	---	U	420	mg/kg dry
Silver	6.2		2.1	mg/kg dry
Thallium	---	U	8.4	mg/kg dry
Vanadium	37		8.4	mg/kg dry
Zinc	26000		8.4	mg/kg dry
Tin	780		4.2	mg/kg dry

**Mercury CVAA**

Mercury	0.99	0.042	mg/kg dry
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS007-1218-001

Sample ID: 1303109-26

**Metals ICP**

Aluminum	10000		40	mg/kg dry
Antimony	18		8.0	mg/kg dry
Arsenic	79		3.2	mg/kg dry
Barium	210		40	mg/kg dry
Beryllium	6.0		1.2	mg/kg dry
Cadmium	2.9		1.2	mg/kg dry
Calcium	31000		200	mg/kg dry
Chromium	13		2.0	mg/kg dry
Cobalt	11		8.0	mg/kg dry
Copper	360		4.0	mg/kg dry
Iron	90000		20	mg/kg dry
Lead	180		3.2	mg/kg dry
Magnesium	7900		200	mg/kg dry
Manganese	38000		10	mg/kg dry
Nickel	40		8.0	mg/kg dry
Potassium	1200		200	mg/kg dry
Selenium	27		8.0	mg/kg dry
Sodium	430		400	mg/kg dry
Silver	4.9		2.0	mg/kg dry
Thallium	---	U	8.0	mg/kg dry
Vanadium	24		8.0	mg/kg dry
Zinc	21000		8.0	mg/kg dry
Tin	12		4.0	mg/kg dry

**Mercury CVAA**

Mercury	---	U	0.043	mg/kg dry
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project:Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS007-1824-001

Sample ID: 1303109-27

**Metals ICP**

Aluminum	16000		42	mg/kg dry
Antimony	---	U	8.5	mg/kg dry
Arsenic	14		3.4	mg/kg dry
Barium	190		42	mg/kg dry
Beryllium	7.1		1.3	mg/kg dry
Cadmium	---	U	1.3	mg/kg dry
Calcium	37000		210	mg/kg dry
Chromium	12		2.1	mg/kg dry
Cobalt	---	U	8.5	mg/kg dry
Copper	20		4.2	mg/kg dry
Iron	25000		21	mg/kg dry
Lead	36		3.4	mg/kg dry
Magnesium	6700		210	mg/kg dry
Manganese	46000		21	mg/kg dry
Nickel	14		8.5	mg/kg dry
Potassium	1500		210	mg/kg dry
Selenium	30		8.5	mg/kg dry
Sodium	480		420	mg/kg dry
Silver	5.2		2.1	mg/kg dry
Thallium	---	U	8.5	mg/kg dry
Vanadium	17		8.5	mg/kg dry
Zinc	5700		8.5	mg/kg dry
Tin	6.6		4.2	mg/kg dry

**Mercury CVAA**

Mercury	---	U	0.035	mg/kg dry
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project:Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS007-1824-001

Sample ID: 1303109-27

**Mercury CVAA**

Field ID: P001-SS008-0206-001

Sample ID: 1303109-28

**Metals ICP**

Aluminum	14000		39	mg/kg dry
Antimony	---	U	7.8	mg/kg dry
Arsenic	5.0		3.1	mg/kg dry
Barium	150		39	mg/kg dry
Beryllium	3.6		1.2	mg/kg dry
Cadmium	5.0		1.2	mg/kg dry
Calcium	15000		190	mg/kg dry
Chromium	65		1.9	mg/kg dry
Cobalt	11		7.8	mg/kg dry
Copper	4400		3.9	mg/kg dry
Iron	53000		19	mg/kg dry
Lead	740		3.1	mg/kg dry
Magnesium	5700		190	mg/kg dry
Manganese	970		1.9	mg/kg dry
Nickel	120		7.8	mg/kg dry
Potassium	1600		190	mg/kg dry
Selenium	---	U	7.8	mg/kg dry
Sodium	910		390	mg/kg dry
Silver	2.7		1.9	mg/kg dry
Thallium	---	U	7.8	mg/kg dry
Vanadium	70		7.8	mg/kg dry
Zinc	4400		7.8	mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
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**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS008-0206-001

Sample ID: 1303109-28

**Metals ICP**

Tin 200 3.9 mg/kg dry

**Mercury CVAA**

Mercury 0.40 0.032 mg/kg dry

Field ID: P001-SS008-2224-001

Sample ID: 1303109-29

**Metals ICP**

Aluminum 3700 48 mg/kg dry

Antimony 21 9.7 mg/kg dry

Arsenic 67 3.9 mg/kg dry

Barium 170 48 mg/kg dry

Beryllium 1.7 1.5 mg/kg dry

Cadmium 3.3 1.5 mg/kg dry

Calcium 4900 240 mg/kg dry

Chromium 16 2.4 mg/kg dry

Cobalt 15 9.7 mg/kg dry

Copper 340 4.8 mg/kg dry

Iron 79000 24 mg/kg dry

Lead 540 3.9 mg/kg dry

Magnesium 1400 240 mg/kg dry

Manganese 15000 12 mg/kg dry

Nickel 38 9.7 mg/kg dry

Potassium 360 240 mg/kg dry

Selenium --- U 9.7 mg/kg dry

Sodium --- U 480 mg/kg dry

Silver --- U 2.4 mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
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**Project:Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS008-2224-001

Sample ID: 1303109-29

**Metals ICP**

Thallium	---	U	9.7	mg/kg dry
Vanadium	19		9.7	mg/kg dry
Zinc	23000		9.7	mg/kg dry
Tin	30		4.8	mg/kg dry

**Mercury CVAA**

Mercury	0.38		0.033	mg/kg dry
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Field ID: P001-SS009-0206-001

Sample ID: 1303109-30

**Metals ICP**

Aluminum	13000		43	mg/kg dry
Antimony	130		8.6	mg/kg dry
Arsenic	22		3.5	mg/kg dry
Barium	560		43	mg/kg dry
Beryllium	7.5		1.3	mg/kg dry
Cadmium	82		1.3	mg/kg dry
Calcium	37000		220	mg/kg dry
Chromium	94		2.2	mg/kg dry
Cobalt	14		8.6	mg/kg dry
Copper	18000		4.3	mg/kg dry
Iron	41000		22	mg/kg dry
Lead	11000		3.5	mg/kg dry
Magnesium	4200		220	mg/kg dry
Manganese	1900		2.2	mg/kg dry
Nickel	300		8.6	mg/kg dry
Potassium	440		220	mg/kg dry



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**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS009-0206-001

Sample ID: 1303109-30

**Metals ICP**

Selenium	---	U	8.6	mg/kg dry
Sodium	---	U	430	mg/kg dry
Silver	9.8		2.2	mg/kg dry
Thallium	---	U	8.6	mg/kg dry
Vanadium	45		8.6	mg/kg dry
Zinc	60000		43	mg/kg dry
Tin	1200		4.3	mg/kg dry

**Mercury CVAA**

Mercury	3.4	0.39	mg/kg dry
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Field ID: P001-SS010-1824-001

Sample ID: 1303109-31

**Metals ICP**

Aluminum	5100	68	mg/kg dry
Antimony	39	14	mg/kg dry
Arsenic	27	5.4	mg/kg dry
Barium	690	68	mg/kg dry
Beryllium	3.9	2.0	mg/kg dry
Cadmium	23	2.0	mg/kg dry
Calcium	35000	340	mg/kg dry
Chromium	77	3.4	mg/kg dry
Cobalt	---	U	mg/kg dry
Copper	25000	6.8	mg/kg dry
Iron	49000	34	mg/kg dry
Lead	5400	5.4	mg/kg dry
Magnesium	14000	340	mg/kg dry



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**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS010-1824-001

Sample ID: 1303109-31

**Metals ICP**

Manganese	2800		3.4	mg/kg dry
Nickel	580		14	mg/kg dry
Potassium	340		340	mg/kg dry
Selenium	---	U	14	mg/kg dry
Sodium	740		680	mg/kg dry
Silver	8.5		3.4	mg/kg dry
Thallium	---	U	14	mg/kg dry
Vanadium	49		14	mg/kg dry
Zinc	14000		14	mg/kg dry
Tin	1100		6.8	mg/kg dry

**Mercury CVAA**

Mercury	2.0	0.21	mg/kg dry
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Field ID: P001-SS013-0206-001

Sample ID: 1303109-32

**Metals ICP**

Aluminum	12000		39	mg/kg dry
Antimony	---	U	7.9	mg/kg dry
Arsenic	---	U	3.2	mg/kg dry
Barium	130		39	mg/kg dry
Beryllium	---	U	1.2	mg/kg dry
Cadmium	---	U	1.2	mg/kg dry
Calcium	13000		200	mg/kg dry
Chromium	37		2.0	mg/kg dry
Cobalt	10		7.9	mg/kg dry



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**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS013-0206-001

Sample ID: 1303109-32

**Metals ICP**

Copper	180		3.9	mg/kg dry
Iron	38000		20	mg/kg dry
Lead	61		3.2	mg/kg dry
Magnesium	7200		200	mg/kg dry
Manganese	330		2.0	mg/kg dry
Nickel	25		7.9	mg/kg dry
Potassium	1800		200	mg/kg dry
Selenium	---	U	7.9	mg/kg dry
Sodium	660		390	mg/kg dry
Silver	---	U	2.0	mg/kg dry
Thallium	---	U	7.9	mg/kg dry
Vanadium	74		7.9	mg/kg dry
Zinc	610		7.9	mg/kg dry
Tin	---	U	3.9	mg/kg dry

**Mercury CVAA**

Mercury	---	U	0.031	mg/kg dry
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Field ID: P001-SS013-0612-001

Sample ID: 1303109-33

**Metals ICP**

Aluminum	6200		40	mg/kg dry
Antimony	---	U	8.1	mg/kg dry
Arsenic	---	U	3.2	mg/kg dry
Barium	47		40	mg/kg dry
Beryllium	---	U	1.2	mg/kg dry



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**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS013-0612-001

Sample ID: 1303109-33

**Metals ICP**

Cadmium	---	U	1.2	mg/kg dry
Calcium	5400		200	mg/kg dry
Chromium	24		2.0	mg/kg dry
Cobalt	8.1		8.1	mg/kg dry
Copper	110		4.0	mg/kg dry
Iron	35000		20	mg/kg dry
Lead	58		3.2	mg/kg dry
Magnesium	4300		200	mg/kg dry
Manganese	180		2.0	mg/kg dry
Nickel	17		8.1	mg/kg dry
Potassium	1700		200	mg/kg dry
Selenium	---	U	8.1	mg/kg dry
Sodium	---	U	400	mg/kg dry
Silver	---	U	2.0	mg/kg dry
Thallium	---	U	8.1	mg/kg dry
Vanadium	69		8.1	mg/kg dry
Zinc	280		8.1	mg/kg dry
Tin	---	U	4.0	mg/kg dry

**Mercury CVAA**

Mercury	---	U	0.039	mg/kg dry
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Field ID: P001-SS013-1218-001

Sample ID: 1303109-34

**Metals ICP**

Aluminum	3900		40	mg/kg dry
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Region 2 Laboratory

**Project:Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS013-1218-001

Sample ID: 1303109-34

**Metals ICP**

Antimony	26		7.9	mg/kg dry
Arsenic	3.8		3.2	mg/kg dry
Barium	50		40	mg/kg dry
Beryllium	---	U	1.2	mg/kg dry
Cadmium	4.5		1.2	mg/kg dry
Calcium	4200		200	mg/kg dry
Chromium	17		2.0	mg/kg dry
Cobalt	---	U	7.9	mg/kg dry
Copper	3300		4.0	mg/kg dry
Iron	13000		20	mg/kg dry
Lead	1100		3.2	mg/kg dry
Magnesium	1700		200	mg/kg dry
Manganese	290		2.0	mg/kg dry
Nickel	40		7.9	mg/kg dry
Potassium	310		200	mg/kg dry
Selenium	---	U	7.9	mg/kg dry
Sodium	---	U	400	mg/kg dry
Silver	---	U	2.0	mg/kg dry
Thallium	---	U	7.9	mg/kg dry
Vanadium	25		7.9	mg/kg dry
Zinc	3700		7.9	mg/kg dry
Tin	98		4.0	mg/kg dry

**Mercury CVAA**

Mercury	0.23	0.039	mg/kg dry
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS013-1824-001

Sample ID: 1303109-35

**Metals ICP**

Aluminum	26000		43	mg/kg dry
Antimony	14		8.6	mg/kg dry
Arsenic	15		3.4	mg/kg dry
Barium	510		43	mg/kg dry
Beryllium	6.9		1.3	mg/kg dry
Cadmium	7.5		1.3	mg/kg dry
Calcium	60000		210	mg/kg dry
Chromium	200		2.1	mg/kg dry
Cobalt	17		8.6	mg/kg dry
Copper	5400		4.3	mg/kg dry
Iron	50000		21	mg/kg dry
Lead	2400		3.4	mg/kg dry
Magnesium	9800		210	mg/kg dry
Manganese	42000		11	mg/kg dry
Nickel	170		8.6	mg/kg dry
Potassium	1500		210	mg/kg dry
Selenium	31		8.6	mg/kg dry
Sodium	650		430	mg/kg dry
Silver	6.0		2.1	mg/kg dry
Thallium	---	U	8.6	mg/kg dry
Vanadium	21		8.6	mg/kg dry
Zinc	6700		8.6	mg/kg dry
Tin	180		4.3	mg/kg dry

**Mercury CVAA**

Mercury	0.047	0.036	mg/kg dry
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project:Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS014-0206-001

Sample ID: 1303109-36

**Metals ICP**

Aluminum	13000		42	mg/kg dry
Antimony	---	U	8.3	mg/kg dry
Arsenic	---	U	3.3	mg/kg dry
Barium	54		42	mg/kg dry
Beryllium	---	U	1.2	mg/kg dry
Cadmium	---	U	1.2	mg/kg dry
Calcium	22000		210	mg/kg dry
Chromium	19		2.1	mg/kg dry
Cobalt	12		8.3	mg/kg dry
Copper	60		4.2	mg/kg dry
Iron	27000		21	mg/kg dry
Lead	15		3.3	mg/kg dry
Magnesium	12000		210	mg/kg dry
Manganese	360		2.1	mg/kg dry
Nickel	28		8.3	mg/kg dry
Potassium	1000		210	mg/kg dry
Selenium	---	U	8.3	mg/kg dry
Sodium	1300		420	mg/kg dry
Silver	---	U	2.1	mg/kg dry
Thallium	---	U	8.3	mg/kg dry
Vanadium	92		8.3	mg/kg dry
Zinc	120		8.3	mg/kg dry
Tin	---	U	4.2	mg/kg dry

**Mercury CVAA**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
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**Project:Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS014-0206-001

Sample ID: 1303109-36

**Mercury CVAA**

Mercury	---	U	0.038	mg/kg dry
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Field ID: P001-SS014-2124-001

Sample ID: 1303109-37

**Metals ICP**

Aluminum	21000		43	mg/kg dry
Antimony	14		8.7	mg/kg dry
Arsenic	46		3.5	mg/kg dry
Barium	270		43	mg/kg dry
Beryllium	5.1		1.3	mg/kg dry
Cadmium	3.5		1.3	mg/kg dry
Calcium	34000		220	mg/kg dry
Chromium	290		2.2	mg/kg dry
Cobalt	45		8.7	mg/kg dry
Copper	610		4.3	mg/kg dry
Iron	73000		22	mg/kg dry
Lead	250		3.5	mg/kg dry
Magnesium	5900		220	mg/kg dry
Manganese	30000		11	mg/kg dry
Nickel	180		8.7	mg/kg dry
Potassium	1500		220	mg/kg dry
Selenium	23		8.7	mg/kg dry
Sodium	610		430	mg/kg dry
Silver	3.4		2.2	mg/kg dry
Thallium	---	U	8.7	mg/kg dry
Vanadium	20		8.7	mg/kg dry



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**Project:Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS014-2124-001

Sample ID: 1303109-37

**Metals ICP**

Zinc	1200		8.7	mg/kg dry
Tin	7.9		4.3	mg/kg dry

**Mercury CVAA**

Mercury	---	U	0.036	mg/kg dry
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Field ID: P001-SS015-0001-001

Sample ID: 1303109-38

**Metals ICP**

Aluminum	7900		45	mg/kg dry
Antimony	---	U	9.1	mg/kg dry
Arsenic	7.4		3.6	mg/kg dry
Barium	65		45	mg/kg dry
Beryllium	---	U	1.4	mg/kg dry
Cadmium	---	U	1.4	mg/kg dry
Calcium	7300		230	mg/kg dry
Chromium	23		2.3	mg/kg dry
Cobalt	---	U	9.1	mg/kg dry
Copper	88		4.5	mg/kg dry
Iron	20000		23	mg/kg dry
Lead	66		3.6	mg/kg dry
Magnesium	3200		230	mg/kg dry
Manganese	500		2.3	mg/kg dry
Nickel	15		9.1	mg/kg dry
Potassium	690		230	mg/kg dry
Selenium	---	U	9.1	mg/kg dry



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**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS015-0001-001

Sample ID: 1303109-38

**Metals ICP**

Sodium	---	U	450	mg/kg dry
Silver	---	U	2.3	mg/kg dry
Thallium	---	U	9.1	mg/kg dry
Vanadium	36		9.1	mg/kg dry
Zinc	230		9.1	mg/kg dry
Tin	---	U	4.5	mg/kg dry

**Mercury CVAA**

Mercury	0.094	0.033	mg/kg dry
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Field ID: P001-SS015-0106-001

Sample ID: 1303109-39

**Metals ICP**

Aluminum	7800		47	mg/kg dry
Antimony	---	U	9.4	mg/kg dry
Arsenic	5.9		3.8	mg/kg dry
Barium	62		47	mg/kg dry
Beryllium	---	U	1.4	mg/kg dry
Cadmium	---	U	1.4	mg/kg dry
Calcium	13000		240	mg/kg dry
Chromium	23		2.4	mg/kg dry
Cobalt	---	U	9.4	mg/kg dry
Copper	82		4.7	mg/kg dry
Iron	16000		24	mg/kg dry
Lead	69		3.8	mg/kg dry
Magnesium	3800		240	mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS015-0106-001

Sample ID: 1303109-39

**Metals ICP**

Manganese	510		2.4	mg/kg dry
Nickel	14		9.4	mg/kg dry
Potassium	610		240	mg/kg dry
Selenium	---	U	9.4	mg/kg dry
Sodium	---	U	470	mg/kg dry
Silver	---	U	2.4	mg/kg dry
Thallium	---	U	9.4	mg/kg dry
Vanadium	28		9.4	mg/kg dry
Zinc	200		9.4	mg/kg dry
Tin	---	U	4.7	mg/kg dry

**Mercury CVAA**

Mercury	0.10		0.045	mg/kg dry
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Field ID: P001-SS015-0612-001

Sample ID: 1303109-40

**Metals ICP**

Aluminum	8100		46	mg/kg dry
Antimony	---	U	9.1	mg/kg dry
Arsenic	9.4		3.6	mg/kg dry
Barium	70		46	mg/kg dry
Beryllium	---	U	1.4	mg/kg dry
Cadmium	---	U	1.4	mg/kg dry
Calcium	11000		230	mg/kg dry
Chromium	24		2.3	mg/kg dry
Cobalt	---	U	9.1	mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
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**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS015-0612-001

Sample ID: 1303109-40

**Metals ICP**

Copper	74		4.6	mg/kg dry
Iron	17000		23	mg/kg dry
Lead	67		3.6	mg/kg dry
Magnesium	3000		230	mg/kg dry
Manganese	540		2.3	mg/kg dry
Nickel	14		9.1	mg/kg dry
Potassium	540		230	mg/kg dry
Selenium	---	U	9.1	mg/kg dry
Sodium	---	U	460	mg/kg dry
Silver	---	U	2.3	mg/kg dry
Thallium	---	U	9.1	mg/kg dry
Vanadium	30		9.1	mg/kg dry
Zinc	190		9.1	mg/kg dry
Tin	---	U	4.6	mg/kg dry

**Mercury CVAA**

Mercury	0.12		0.047	mg/kg dry
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Field ID: P001-SS015-1218-001

Sample ID: 1303109-41

**Metals ICP**

Aluminum	8000		46	mg/kg dry
Antimony	---	U	9.2	mg/kg dry
Arsenic	11		3.7	mg/kg dry
Barium	69		46	mg/kg dry
Beryllium	---	U	1.4	mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS015-1218-001

Sample ID: 1303109-41

**Metals ICP**

Cadmium	---	U	1.4	mg/kg dry
Calcium	11000		230	mg/kg dry
Chromium	33		2.3	mg/kg dry
Cobalt	---	U	9.2	mg/kg dry
Copper	77		4.6	mg/kg dry
Iron	17000		23	mg/kg dry
Lead	65		3.7	mg/kg dry
Magnesium	3400		230	mg/kg dry
Manganese	550		2.3	mg/kg dry
Nickel	15		9.2	mg/kg dry
Potassium	630		230	mg/kg dry
Selenium	---	U	9.2	mg/kg dry
Sodium	---	U	460	mg/kg dry
Silver	---	U	2.3	mg/kg dry
Thallium	---	U	9.2	mg/kg dry
Vanadium	31		9.2	mg/kg dry
Zinc	180		9.2	mg/kg dry
Tin	---	U	4.6	mg/kg dry

**Mercury CVAA**

Mercury	0.12	0.047	mg/kg dry
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Field ID: P001-SS015-1824-001

Sample ID: 1303109-42

**Metals ICP**

Aluminum	7900	44	mg/kg dry
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P001-SS015-1824-001

Sample ID: 1303109-42

**Metals ICP**

Antimony	---	U	8.9	mg/kg dry
Arsenic	25		3.6	mg/kg dry
Barium	73		44	mg/kg dry
Beryllium	---	U	1.3	mg/kg dry
Cadmium	---	U	1.3	mg/kg dry
Calcium	11000		220	mg/kg dry
Chromium	39		2.2	mg/kg dry
Cobalt	---	U	8.9	mg/kg dry
Copper	83		4.4	mg/kg dry
Iron	17000		22	mg/kg dry
Lead	76		3.6	mg/kg dry
Magnesium	3500		220	mg/kg dry
Manganese	590		2.2	mg/kg dry
Nickel	36		8.9	mg/kg dry
Potassium	500		220	mg/kg dry
Selenium	---	U	8.9	mg/kg dry
Sodium	---	U	440	mg/kg dry
Silver	---	U	2.2	mg/kg dry
Thallium	---	U	8.9	mg/kg dry
Vanadium	31		8.9	mg/kg dry
Zinc	210		8.9	mg/kg dry
Tin	---	U	4.4	mg/kg dry

**Mercury CVAA**

Mercury	0.11	0.045	mg/kg dry
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project:Barth Smelting Co.-1303109**

**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: RB-032613

Sample ID: 1303109-43

**Metals ICP**

Aluminum	---	U	100	ug/L
Antimony	---	U	20	ug/L
Arsenic	---	U	8.0	ug/L
Barium	---	U	100	ug/L
Beryllium	---	U	3.0	ug/L
Cadmium	---	U	3.0	ug/L
Calcium	---	U	500	ug/L
Chromium	---	U	5.0	ug/L
Cobalt	---	U	20	ug/L
Copper	---	U	10	ug/L
Iron	---	U	50	ug/L
Lead	---	U	8.0	ug/L
Magnesium	---	U	500	ug/L
Manganese	---	U	5.0	ug/L
Nickel	---	U	20	ug/L
Potassium	---	U	500	ug/L
Selenium	---	U	20	ug/L
Silver	---	U	5.0	ug/L
Sodium	---	U	1000	ug/L
Thallium	---	U J	20	ug/L
Vanadium	---	U	20	ug/L
Zinc	---	U	20	ug/L



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.-1303109**  
**Project Number: 1303109**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: RB-032613

Sample ID: 1303109-43

**Metals ICP**

Tin                                  ---                                  U                                  10                                  ug/L

**Mercury CVAA**

Mercury                            ---                                  U                                  0.20                                  ug/L



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 2 Laboratory  
2890 Woodbridge Avenue  
Edison , New Jersey 08837  
732-906-6886 Phone  
732-906-6165 Fax

June 20, 2013

Smita Sumbaly  
Weston Solutions Inc.  
205 Campus Drive  
Edison, NJ 08837

RE: Barth Smelting Co.- 1305043

Enclosed are the results of analyses for samples received by the laboratory on 05/17/2013. The signature below reflects the laboratory's approval of the reported results. If you have any questions concerning this report, please refer to Project Number 1305043 and contact John Birri by phone at 732-906-6886, or via Email at [birri.john@epa.gov](mailto:birri.john@epa.gov).

Sincerely,

John R. Bourbon  
Chief, DESA/LB



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory**

**Project: Barth Smelting Co.- 1305043**

**Project Number: 1305043**

**Project Narrative:**

The National Environmental Laboratory Accreditation Conference Institute (TNI) is a voluntary environmental laboratory accreditation association of State and Federal agencies. TNI established and promoted a National Environmental Laboratory Accreditation Program (NELAP) that provides a uniform set of standards for the generation of environmental data that are of known and defensible quality. The EPA Region 2 Laboratory is NELAP accredited. The Laboratory tests that are accredited have met all the requirements established under the TNI Standards.

**Condition Comments**

None

**Comment(s):**

None

**Data Qualifier(s):**

- U- The analyte was not detected at or above the Reporting Limit.
- J- The identification of the analyte is acceptable; the reported value is an estimate.
- K- The identification of the analyte is acceptable; the reported value may be biased high.
- L- The identification of the analyte is acceptable; the reported value may be biased low.
- NJ- There is presumptive evidence that the analyte is present; the analyte is reported as a tentative identification. The reported value is an estimate.

**Reporting Limit(s):**

The Laboratory was able to achieve the appropriate limits for each analyte requested.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project:Barth Smelting Co.- 1305043**

**Project Number: 1305043**

**SUMMARY REPORT FOR SAMPLES**

Field ID	Laboratory ID	Matrix	Date Sampled	Date Received
P002-SS037-0612-001	1305043-01	Solid	05/15/2013 09:45	05/17/2013 11:30
P002-SS038-0106-001	1305043-02	Solid	05/15/2013 09:37	05/17/2013 11:30
P002-SS042-0106-001	1305043-03	Solid	05/15/2013 11:00	05/17/2013 11:30
P002-SS043-0612-001	1305043-04	Solid	05/15/2013 11:36	05/17/2013 11:30
P002-SS045-0106-001	1305043-05	Solid	05/15/2013 12:04	05/17/2013 11:30
P002-SS045-0106-002	1305043-06	Solid	05/15/2013 12:08	05/17/2013 11:30
P002-SS049-0612-001	1305043-07	Solid	05/15/2013 13:41	05/17/2013 11:30
P002-SS052-0106-001	1305043-08	Solid	05/16/2013 09:10	05/17/2013 11:30
P002-SS054-0001-001	1305043-09	Solid	05/16/2013 09:12	05/17/2013 11:30
P002-SS059-0001-001	1305043-10	Solid	05/16/2013 12:40	05/17/2013 11:30
P002-SS060-0612-001	1305043-11	Solid	05/16/2013 11:20	05/17/2013 11:30
P002-SS061-0612-001	1305043-12	Solid	05/16/2013 11:36	05/17/2013 11:30
P002-SS066-0612-001	1305043-13	Solid	05/16/2013 14:40	05/17/2013 11:30
P002-SS068-1218-001	1305043-14	Solid	05/16/2013 16:00	05/17/2013 11:30
RB-051513	1305043-15	Aqueous	05/15/2013 16:30	05/17/2013 11:30
RB-051613	1305043-16	Aqueous	05/16/2013 16:30	05/17/2013 11:30



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory**

**Project: Barth Smelting Co.- 1305043**

**Project Number: 1305043**

**SUMMARY REPORT FOR METHODS**

<b>Analysis</b>	<b>Method</b>	<b>Certification</b>	<b>Matrix</b>
E-Metals ICP TAL	EPA 200.7 / SOP C-109 Rev3.2	NELAP	Aqueous
E-Metals ICP TAL	EPA 200.7 / SOP C-109 Rev3.2	NELAP	Solid
Mercury	EPA 245.1 / SOP C-110 Rev2.3	NELAP	Aqueous
Mercury	EPA 245.1 / SOP C-110 Rev2.3	NELAP	Solid



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.- 1305043**

**Project Number: 1305043**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P002-SS037-0612-001

Sample ID: 1305043-01

**Metals ICP**

Aluminum	9500		8.6	mg/kg dry
Antimony	1.8		1.7	mg/kg dry
Arsenic	6.9		0.69	mg/kg dry
Barium	61		8.6	mg/kg dry
Beryllium	0.43		0.26	mg/kg dry
Cadmium	0.77		0.26	mg/kg dry
Calcium	1500		43	mg/kg dry
Chromium	14		0.43	mg/kg dry
Cobalt	5.0		1.7	mg/kg dry
Copper	74		0.86	mg/kg dry
Iron	14000		4.3	mg/kg dry
Lead	73		0.69	mg/kg dry
Magnesium	1900		43	mg/kg dry
Manganese	450		0.43	mg/kg dry
Nickel	12		1.7	mg/kg dry
Potassium	390		43	mg/kg dry
Selenium	---	U	1.7	mg/kg dry
Sodium	420		86	mg/kg dry
Silver	---	U	0.43	mg/kg dry
Thallium	---	U	1.7	mg/kg dry
Vanadium	23		1.7	mg/kg dry
Zinc	610		1.7	mg/kg dry
Tin	5.0		0.86	mg/kg dry

**Mercury CVAA**

Mercury	0.25	0.047	mg/kg dry
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.- 1305043**

**Project Number: 1305043**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P002-SS038-0106-001

Sample ID: 1305043-02

**Metals ICP**

Aluminum	8800		9.3	mg/kg dry
Antimony	3.8		1.9	mg/kg dry
Arsenic	7.3		0.74	mg/kg dry
Barium	68		9.3	mg/kg dry
Beryllium	0.49		0.28	mg/kg dry
Cadmium	2.6		0.28	mg/kg dry
Calcium	2200		46	mg/kg dry
Chromium	17		0.46	mg/kg dry
Cobalt	6.4		1.9	mg/kg dry
Copper	400		0.93	mg/kg dry
Iron	15000		4.6	mg/kg dry
Lead	200		0.74	mg/kg dry
Magnesium	1800		46	mg/kg dry
Manganese	550		0.46	mg/kg dry
Nickel	21		1.9	mg/kg dry
Potassium	470		46	mg/kg dry
Selenium	---	U	1.9	mg/kg dry
Sodium	310		93	mg/kg dry
Silver	---	U	0.46	mg/kg dry
Thallium	---	U	1.9	mg/kg dry
Vanadium	30		1.9	mg/kg dry
Zinc	1100		1.9	mg/kg dry
Tin	20		0.93	mg/kg dry

**Mercury CVAA**

Mercury	0.23	0.052	mg/kg dry
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.- 1305043**

**Project Number: 1305043**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P002-SS042-0106-001

Sample ID: 1305043-03

**Metals ICP**

Aluminum	7100		8.6	mg/kg dry
Antimony	10		1.7	mg/kg dry
Arsenic	11		0.69	mg/kg dry
Barium	100		8.6	mg/kg dry
Beryllium	0.87		0.26	mg/kg dry
Cadmium	19		0.26	mg/kg dry
Calcium	2400		43	mg/kg dry
Chromium	27		0.43	mg/kg dry
Cobalt	10		1.7	mg/kg dry
Copper	3100		0.86	mg/kg dry
Iron	14000		4.3	mg/kg dry
Lead	2200		0.69	mg/kg dry
Magnesium	1700		43	mg/kg dry
Manganese	770		0.43	mg/kg dry
Nickel	66		1.7	mg/kg dry
Potassium	340		43	mg/kg dry
Selenium	---	U	1.7	mg/kg dry
Sodium	150		86	mg/kg dry
Silver	1.8		0.43	mg/kg dry
Thallium	---	U	1.7	mg/kg dry
Vanadium	91		1.7	mg/kg dry
Zinc	6100		1.7	mg/kg dry
Tin	270		0.86	mg/kg dry

**Mercury CVAA**

Mercury	0.62	0.053	mg/kg dry
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.- 1305043**

**Project Number: 1305043**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P002-SS043-0612-001

Sample ID: 1305043-04

**Metals ICP**

Aluminum	11000		8.8	mg/kg dry
Antimony	8.4		1.8	mg/kg dry
Arsenic	18		0.70	mg/kg dry
Barium	110		8.8	mg/kg dry
Beryllium	1.7		0.26	mg/kg dry
Cadmium	22		0.26	mg/kg dry
Calcium	5000		44	mg/kg dry
Chromium	130		0.44	mg/kg dry
Cobalt	15		1.8	mg/kg dry
Copper	710		0.88	mg/kg dry
Iron	36000		4.4	mg/kg dry
Lead	710		0.70	mg/kg dry
Magnesium	2500		44	mg/kg dry
Manganese	9600		4.4	mg/kg dry
Nickel	71		1.8	mg/kg dry
Potassium	640		44	mg/kg dry
Selenium	---	U	18	mg/kg dry
Sodium	400		88	mg/kg dry
Silver	---	U	4.4	mg/kg dry
Thallium	---	U	3.5	mg/kg dry
Vanadium	38		1.8	mg/kg dry
Zinc	10000		18	mg/kg dry
Tin	77		0.88	mg/kg dry

**Mercury CVAA**

Mercury	---	U	0.057	mg/kg dry
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.- 1305043**

**Project Number: 1305043**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P002-SS043-0612-001

Sample ID: 1305043-04

**Mercury CVAA**

Field ID: P002-SS045-0106-001

Sample ID: 1305043-05

**Metals ICP**

Aluminum	7500		8.9	mg/kg dry
Antimony	---	U	1.8	mg/kg dry
Arsenic	4.6		0.71	mg/kg dry
Barium	52		8.9	mg/kg dry
Beryllium	0.49		0.27	mg/kg dry
Cadmium	1.5		0.27	mg/kg dry
Calcium	2000		45	mg/kg dry
Chromium	120		0.45	mg/kg dry
Cobalt	6.7		1.8	mg/kg dry
Copper	280		0.89	mg/kg dry
Iron	17000		4.5	mg/kg dry
Lead	140		0.71	mg/kg dry
Magnesium	1700		45	mg/kg dry
Manganese	540		0.45	mg/kg dry
Nickel	23		1.8	mg/kg dry
Potassium	270		45	mg/kg dry
Selenium	---	U J	1.8	mg/kg dry
Sodium	330		89	mg/kg dry
Silver	---	U	0.45	mg/kg dry
Thallium	---	U	1.8	mg/kg dry
Vanadium	54		1.8	mg/kg dry
Zinc	730		1.8	mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.- 1305043**

**Project Number: 1305043**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P002-SS045-0106-001

Sample ID: 1305043-05

**Metals ICP**

Tin 13 0.89 mg/kg dry

**Mercury CVAA**

Mercury 0.17 0.045 mg/kg dry

Field ID: P002-SS045-0106-002

Sample ID: 1305043-06

**Metals ICP**

Aluminum	8000		9.7	mg/kg dry
Antimony	---	U	1.9	mg/kg dry
Arsenic	4.4		0.77	mg/kg dry
Barium	54		9.7	mg/kg dry
Beryllium	0.40		0.29	mg/kg dry
Cadmium	1.5		0.29	mg/kg dry
Calcium	2100		48	mg/kg dry
Chromium	100		0.48	mg/kg dry
Cobalt	7.7		1.9	mg/kg dry
Copper	250		0.97	mg/kg dry
Iron	16000		4.8	mg/kg dry
Lead	140		0.77	mg/kg dry
Magnesium	2500		48	mg/kg dry
Manganese	780		0.48	mg/kg dry
Nickel	25		1.9	mg/kg dry
Potassium	320		48	mg/kg dry
Selenium	---	U	1.9	mg/kg dry
Sodium	350		97	mg/kg dry
Silver	1.2		0.48	mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.- 1305043**

**Project Number: 1305043**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P002-SS045-0106-002

Sample ID: 1305043-06

**Metals ICP**

Thallium	---	U	1.9	mg/kg dry
Vanadium	50		1.9	mg/kg dry
Zinc	730		1.9	mg/kg dry
Tin	13		0.97	mg/kg dry

**Mercury CVAA**

Mercury	0.15	0.051	mg/kg dry
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Field ID: P002-SS049-0612-001

Sample ID: 1305043-07

**Metals ICP**

Aluminum	11000	8.5	mg/kg dry
Antimony	34	1.7	mg/kg dry
Arsenic	33	0.68	mg/kg dry
Barium	150	8.5	mg/kg dry
Beryllium	3.0	0.26	mg/kg dry
Cadmium	45	0.26	mg/kg dry
Calcium	15000	43	mg/kg dry
Chromium	210	0.43	mg/kg dry
Cobalt	23	1.7	mg/kg dry
Copper	2200	0.85	mg/kg dry
Iron	60000	43	mg/kg dry
Lead	1700	0.68	mg/kg dry
Magnesium	4000	43	mg/kg dry
Manganese	28000	21	mg/kg dry
Nickel	87	1.7	mg/kg dry
Potassium	690	43	mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.- 1305043**

**Project Number: 1305043**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P002-SS049-0612-001

Sample ID: 1305043-07

**Metals ICP**

Selenium	---	U	85	mg/kg dry
Sodium	610		85	mg/kg dry
Silver	---	U	21	mg/kg dry
Thallium	---	U	3.4	mg/kg dry
Vanadium	23		1.7	mg/kg dry
Zinc	25000		17	mg/kg dry
Tin	240		0.85	mg/kg dry

**Mercury CVAA**

Mercury	0.25	0.054	mg/kg dry
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Field ID: P002-SS052-0106-001

Sample ID: 1305043-08

**Metals ICP**

Aluminum	7800	9.3	mg/kg dry
Antimony	14	1.9	mg/kg dry
Arsenic	36	0.74	mg/kg dry
Barium	87	9.3	mg/kg dry
Beryllium	1.7	0.28	mg/kg dry
Cadmium	2.5	0.28	mg/kg dry
Calcium	7900	47	mg/kg dry
Chromium	16	0.47	mg/kg dry
Cobalt	6.1	1.9	mg/kg dry
Copper	110	0.93	mg/kg dry
Iron	49000	47	mg/kg dry
Lead	46	0.74	mg/kg dry
Magnesium	3000	47	mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.- 1305043**

**Project Number: 1305043**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P002-SS052-0106-001

Sample ID: 1305043-08

**Metals ICP**

Manganese	23000		4.7	mg/kg dry
Nickel	20		1.9	mg/kg dry
Potassium	450		47	mg/kg dry
Selenium	---	U	19	mg/kg dry
Sodium	230		93	mg/kg dry
Silver	---	U	4.7	mg/kg dry
Thallium	---	U	3.7	mg/kg dry
Vanadium	19		1.9	mg/kg dry
Zinc	27000		19	mg/kg dry
Tin	5.3		0.93	mg/kg dry

**Mercury CVAA**

Mercury	0.091	0.042	mg/kg dry
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Field ID: P002-SS054-0001-001

Sample ID: 1305043-09

**Metals ICP**

Aluminum	9200	9.9	mg/kg dry
Antimony	15	2.0	mg/kg dry
Arsenic	28	0.79	mg/kg dry
Barium	110	9.9	mg/kg dry
Beryllium	2.2	0.30	mg/kg dry
Cadmium	19	0.30	mg/kg dry
Calcium	8600	50	mg/kg dry
Chromium	45	0.50	mg/kg dry
Cobalt	11	2.0	mg/kg dry
Copper	3900	0.99	mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.- 1305043**

**Project Number: 1305043**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P002-SS054-0001-001

Sample ID: 1305043-09

**Metals ICP**

Iron	38000		5.0	mg/kg dry
Lead	1700		0.79	mg/kg dry
Magnesium	4700		50	mg/kg dry
Manganese	14000		5.0	mg/kg dry
Nickel	86		2.0	mg/kg dry
Potassium	760		50	mg/kg dry
Selenium	---	U	20	mg/kg dry
Sodium	500		99	mg/kg dry
Silver	---	U	5.0	mg/kg dry
Thallium	---	U	4.0	mg/kg dry
Vanadium	49		2.0	mg/kg dry
Zinc	19000		20	mg/kg dry
Tin	170		0.99	mg/kg dry

**Mercury CVAA**

Mercury	0.35	0.049	mg/kg dry
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Field ID: P002-SS059-0001-001

Sample ID: 1305043-10

**Metals ICP**

Aluminum	7500	9.8	mg/kg dry
Antimony	6.5	2.0	mg/kg dry
Arsenic	12	0.78	mg/kg dry
Barium	90	9.8	mg/kg dry
Beryllium	0.74	0.29	mg/kg dry
Cadmium	7.9	0.29	mg/kg dry
Calcium	3600	49	mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.- 1305043**

**Project Number: 1305043**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P002-SS059-0001-001

Sample ID: 1305043-10

**Metals ICP**

Chromium	34		0.49	mg/kg dry
Cobalt	7.8		2.0	mg/kg dry
Copper	800		0.98	mg/kg dry
Iron	24000		4.9	mg/kg dry
Lead	420		0.78	mg/kg dry
Magnesium	2500		49	mg/kg dry
Manganese	4800		2.4	mg/kg dry
Nickel	38		2.0	mg/kg dry
Potassium	670		49	mg/kg dry
Selenium	---	U	9.8	mg/kg dry
Sodium	340		98	mg/kg dry
Silver	---	U	2.4	mg/kg dry
Thallium	---	U	2.0	mg/kg dry
Vanadium	54		2.0	mg/kg dry
Zinc	5400		2.0	mg/kg dry
Tin	57		0.98	mg/kg dry

**Mercury CVAA**

Mercury	0.19		0.046	mg/kg dry
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Field ID: P002-SS060-0612-001

Sample ID: 1305043-11

**Metals ICP**

Aluminum	7100		8.5	mg/kg dry
Antimony	14		1.7	mg/kg dry
Arsenic	18		0.68	mg/kg dry
Barium	88		8.5	mg/kg dry



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.- 1305043**

**Project Number: 1305043**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P002-SS060-0612-001

Sample ID: 1305043-11

**Metals ICP**

Beryllium	1.2		0.26	mg/kg dry
Cadmium	14		0.26	mg/kg dry
Calcium	8800		43	mg/kg dry
Chromium	57		0.43	mg/kg dry
Cobalt	13		1.7	mg/kg dry
Copper	210		0.85	mg/kg dry
Iron	130000		43	mg/kg dry
Lead	93		0.68	mg/kg dry
Magnesium	2500		43	mg/kg dry
Manganese	31000		21	mg/kg dry
Nickel	50		1.7	mg/kg dry
Potassium	440		43	mg/kg dry
Selenium	---	U	85	mg/kg dry
Sodium	340		85	mg/kg dry
Silver	---	U	21	mg/kg dry
Thallium	---	U	3.4	mg/kg dry
Vanadium	51		1.7	mg/kg dry
Zinc	18000		17	mg/kg dry
Tin	8.9		0.85	mg/kg dry

**Mercury CVAA**

Mercury	---	U	0.046	mg/kg dry
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Field ID: P002-SS061-0612-001

Sample ID: 1305043-12

**Metals ICP**

Aluminum	8800	9.8	mg/kg dry
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.- 1305043**

**Project Number: 1305043**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P002-SS061-0612-001

Sample ID: 1305043-12

**Metals ICP**

Antimony	34		2.0	mg/kg dry
Arsenic	50		0.78	mg/kg dry
Barium	250		9.8	mg/kg dry
Beryllium	2.1		0.29	mg/kg dry
Cadmium	85		0.29	mg/kg dry
Calcium	4600		49	mg/kg dry
Chromium	27		0.49	mg/kg dry
Cobalt	10		2.0	mg/kg dry
Copper	6600		0.98	mg/kg dry
Iron	59000		49	mg/kg dry
Lead	2400		0.78	mg/kg dry
Magnesium	2500		49	mg/kg dry
Manganese	22000		4.9	mg/kg dry
Nickel	130		2.0	mg/kg dry
Potassium	400		49	mg/kg dry
Selenium	---	U	20	mg/kg dry
Sodium	230		98	mg/kg dry
Silver	---	U	4.9	mg/kg dry
Thallium	---	U	3.9	mg/kg dry
Vanadium	46		2.0	mg/kg dry
Zinc	53000		20	mg/kg dry
Tin	240		0.98	mg/kg dry

**Mercury CVAA**

Mercury	0.53	0.044	mg/kg dry
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.- 1305043**

**Project Number: 1305043**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P002-SS066-0612-001

Sample ID: 1305043-13

**Metals ICP**

Aluminum	13000		9.0	mg/kg dry
Antimony	20		1.8	mg/kg dry
Arsenic	52		0.72	mg/kg dry
Barium	170		9.0	mg/kg dry
Beryllium	1.7		0.27	mg/kg dry
Cadmium	11		0.27	mg/kg dry
Calcium	18000		45	mg/kg dry
Chromium	22		0.45	mg/kg dry
Cobalt	9.3		1.8	mg/kg dry
Copper	1200		0.90	mg/kg dry
Iron	68000		45	mg/kg dry
Lead	340		0.72	mg/kg dry
Magnesium	6500		45	mg/kg dry
Manganese	31000		22	mg/kg dry
Nickel	42		1.8	mg/kg dry
Potassium	850		45	mg/kg dry
Selenium	---	U	90	mg/kg dry
Sodium	400		90	mg/kg dry
Silver	---	U	22	mg/kg dry
Thallium	---	U	3.6	mg/kg dry
Vanadium	28		1.8	mg/kg dry
Zinc	19000		18	mg/kg dry
Tin	37		0.90	mg/kg dry

**Mercury CVAA**

Mercury	0.68	0.048	mg/kg dry
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.- 1305043**

**Project Number: 1305043**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: P002-SS068-1218-001

Sample ID: 1305043-14

**Metals ICP**

Aluminum	7600		8.9	mg/kg dry
Antimony	10		1.8	mg/kg dry
Arsenic	52		0.71	mg/kg dry
Barium	110		8.9	mg/kg dry
Beryllium	1.1		0.27	mg/kg dry
Cadmium	3.0		0.27	mg/kg dry
Calcium	6600		45	mg/kg dry
Chromium	26		0.45	mg/kg dry
Cobalt	7.7		1.8	mg/kg dry
Copper	130		0.89	mg/kg dry
Iron	33000		4.5	mg/kg dry
Lead	210		0.71	mg/kg dry
Magnesium	3700		45	mg/kg dry
Manganese	17000		4.5	mg/kg dry
Nickel	28		1.8	mg/kg dry
Potassium	460		45	mg/kg dry
Selenium	---	U	18	mg/kg dry
Sodium	440		89	mg/kg dry
Silver	---	U	4.5	mg/kg dry
Thallium	---	U	3.6	mg/kg dry
Vanadium	35		1.8	mg/kg dry
Zinc	21000		18	mg/kg dry
Tin	12		0.89	mg/kg dry

**Mercury CVAA**

Mercury	0.42	0.047	mg/kg dry
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.- 1305043**

**Project Number: 1305043**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: RB-051513

Sample ID: 1305043-15

**Metals ICP**

Aluminum	---	U	100	ug/L
Antimony	---	U	20	ug/L
Arsenic	---	U	8.0	ug/L
Barium	---	U	100	ug/L
Beryllium	---	U	3.0	ug/L
Cadmium	---	U	3.0	ug/L
Calcium	---	U	500	ug/L
Chromium	---	U	5.0	ug/L
Cobalt	---	U	20	ug/L
Copper	---	U	10	ug/L
Iron	---	U	50	ug/L
Lead	---	U	8.0	ug/L
Magnesium	---	U	500	ug/L
Manganese	---	U	5.0	ug/L
Nickel	---	U	20	ug/L
Potassium	---	U	500	ug/L
Selenium	---	U	20	ug/L
Silver	---	U	5.0	ug/L
Sodium	---	U	1000	ug/L
Thallium	---	U J	20	ug/L
Vanadium	---	U	20	ug/L
Zinc	---	U	20	ug/L



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.- 1305043**

**Project Number: 1305043**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: RB-051513

Sample ID: 1305043-15

**Metals ICP**

Tin --- U 10 ug/L

**Mercury CVAA**

Mercury --- U 0.20 ug/L

Field ID: RB-051613

Sample ID: 1305043-16

**Metals ICP**

Aluminum --- U 100 ug/L

Antimony --- U 20 ug/L

Arsenic --- U 8.0 ug/L

Barium --- U 100 ug/L

Beryllium --- U 3.0 ug/L

Cadmium --- U 3.0 ug/L

Calcium --- U 500 ug/L

Chromium --- U 5.0 ug/L

Cobalt --- U 20 ug/L

Copper --- U 10 ug/L

Iron --- U 50 ug/L

Lead --- U 8.0 ug/L

Magnesium --- U 500 ug/L

Manganese --- U 5.0 ug/L

Nickel --- U 20 ug/L

Potassium --- U 500 ug/L

Selenium --- U 20 ug/L



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 2 Laboratory

**Project: Barth Smelting Co.- 1305043**

**Project Number: 1305043**

Analyte	Result	Qualifier	Reporting Limit	Units
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Field ID: RB-051613

Sample ID: 1305043-16

**Metals ICP**

Silver	---	U	5.0	ug/L
Sodium	---	U	1000	ug/L
Thallium	---	U	20	ug/L
Vanadium	---	U	20	ug/L
Zinc	---	U	20	ug/L
Tin	---	U	10	ug/L

**Mercury CVAA**

Mercury	---	U	0.20	ug/L
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USEPA

Date Shipped: 4/2/2013

Carrier Name: Hand-Deliver

Airbill No: N/A

**CHAIN OF CUSTODY RECORD**

R02\_Barth Smelting Corp./NJ

Contact Name: Scott Snyder

Contact Phone: 732-570-4993

No: 2-040213-070554-0002

Cooler #: \_\_\_\_\_

Lab: DESA

Lab Phone: 732-321-6707

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
P002-SS001-0001-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	08:15	1	4-oz. glass jar	4 C	N	
P002-SS001-0106-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	08:17	1	4-oz. glass jar	4 C	N	
P002-SS001-0612-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	08:19	1	4-oz. glass jar	4 C	N	
P002-SS001-1218-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	08:21	1	4-oz. glass jar	4 C	N	
P002-SS001-1824-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	08:25	2	4-oz. glass jar	4 C	Y	
P002-SS001-1824-002	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	08:25	1	4-oz. glass jar	4 C	N	
P002-SS002-0001-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	08:45	1	4-oz. glass jar	4 C	N	
P002-SS002-0106-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	08:47	1	4-oz. glass jar	4 C	N	
P002-SS002-0612-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	08:50	1	4-oz. glass jar	4 C	N	
P002-SS002-1218-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	08:52	1	4-oz. glass jar	4 C	N	
P002-SS002-1824-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	08:55	1	4-oz. glass jar	4 C	N	

Special Instructions: The following samples are designated for 250-micron sieving: P002-SS001-0001-001, P002-SS002-0001-001, P002-SS003-0001-001, P002-SS004-0001-001, P002-SS005-0001-001, P002-SS006-0001-001, P002-SS007-0001-001, P002-SS011-0001-001, P002-SS014-0001-001, P002-SS016-0001-001, P002-SS019-0001-001, P002-SS012-0001-001, P002-SS023-0001-001, P002-SS013-0001-001, P002-SS009-0001-001, P002-SS008-0001-001.

**SAMPLES TRANSFERRED FROM****CHAIN OF CUSTODY #**

Items/Reason	Relinquished by	Date Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
Lad Anh-100	R.F.	4/1/13	4/1/13	05						

Colder # 1 = 4.3 °C  
Colder # 2 = 3.2 °C  
Date 4/2/13

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DateShipped: 4/2/2013

Carrier Name: Hand-Deliver

Airbill No: N/A

CHAIN OF CUSTODY RECORD

R02\_Barth Smelting Corp./NJ

Contact Name: Scott Snyder

Contact Phone: 732-570-4991

-040213-070554-0002  
Cooler #: Lab: DESA  
Lab Phone: 732-321-6707

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Numb	Container	Preservative	MS/MSD
						Cont			
	P002-SS003-0001-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	09:05	1	4-oz. glass jar	4 C	N
	P002-SS003-0106-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	09:07	1	4-oz. glass jar	4 C	N
	P002-SS003-0612-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	09:09	1	4-oz. glass jar	4 C	N
	P002-SS003-1218-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	09:10	1	4-oz. glass jar	4 C	N
	P002-SS003-1824-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	09:12	1	4-oz. glass jar	4 C	N
	P002-SS004-0001-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	09:20	1	4-oz. glass jar	4 C	N
	P002-SS004-0106-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	09:22	1	4-oz. glass jar	4 C	N
	P002-SS004-0612-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	09:24	1	4-oz. glass jar	4 C	N
	P002-SS004-1218-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	09:26	1	4-oz. glass jar	4 C	N
	P002-SS004-1824-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	09:30	1	4-oz. glass jar	4 C	N
	P002-SS005-0001-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	09:40	1	4-oz. glass jar	4 C	N

**Special Instructions:** The following samples are designated for 250-micron sieving: P002-SS001-0001-001, P002-SS004-0001-001, P002-SS005-0001-001, P002-SS006-0001-001, P002-SS007-

## SAMPLES TRANSFERRED FROM CHAIN OF SIGHTS."

CHAIN OF CUSTODY #

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Date	Time	Reason	Reinquired By
2023-01-01	10:00 AM	Initial Inquiry	John Doe

Lab. No. 133-134

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DateShipped: 4/2/2013

CarrierName: Hand-Del

Airbill No: N/A

**CHAIN OF CUSTODY RECORD**

R02 Barth Smelting Corp./NJ

Contact Name: Scott Snyder

Contact Phone: 732-570-4993

Contact Phone: /32-5/0-4993

No: 2-040213-070554-0002

Cooler #

ab.  
DESA

13th Branch: 733-331-6707

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
	P002-SS005-0106-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	09:42	1	4-oz. glass jar	4 C	N
	P002-SS005-0612-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	09:43	1	4-oz. glass jar	4 C	N
	P002-SS005-1218-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	09:44	1	4-oz. glass jar	4 C	N
	P002-SS005-1824-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	09:45	2	4-oz. glass jar	4 C	Y
	P002-SS005-1824-002	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	09:45	1	4-oz. glass jar	4 C	N
	P002-SS006-0001-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	09:50	1	4-oz. glass jar	4 C	N
	P002-SS006-0106-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	09:52	1	4-oz. glass jar	4 C	N
	P002-SS006-0612-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	09:54	1	4-oz. glass jar	4 C	N
	P002-SS006-1218-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	09:56	1	4-oz. glass jar	4 C	N
	P002-SS006-1824-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	09:58	1	4-oz. glass jar	4 C	N
	P002-SS007-0001-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	10:10	1	4-oz. glass jar	4 C	N

**SPECIAL INSTRUCTIONS:** The following samples are designated for 250-micron sieving: P002-SS001-0001-001, P002-SS002-0001-

P002-SS011-0001-001 P002-SS012-0001-001 P002-SS013-0001-001 P002-SS014-0001-001 P002-SS015-0001-001 P002-SS016-0001-001 P002-SS017-0001-001 P002-SS018-0001-001 P002-SS019-0001-001 P002-SS020-0001-001

SS023-0001-001, P002-SS013-0001-001, P002-SS010-0001-001, P002-SS009-0001-001, P002-SS008-0001-001.

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Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished by

1. *Urotheca* *luteola* (L.) Benth. (Syn. *Urotheca* *lutea* L.)

1423 Amherst

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USEPA

Date Skinned: 1/2/2013

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Calligraphy. Handwriting

**CHAIN OF CUSTODY RECORD**

No: Z-040213-0/0334-0002

Cooler #:

Lab: DESA

2-321-6707

R02\_Barth Smelting Corp./NJ  
Contact Name: Scott Snyder  
Contact Phone: 732-570-4993

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
	P002-SS007-0106-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	10:12	1	4-oz. glass jar	4 C	N
	P002-SS007-0612-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	10:15	1	4-oz. glass jar	4 C	N
	P002-SS007-1218-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	10:18	1	4-oz. glass jar	4 C	N
	P002-SS007-1824-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	10:20	1	4-oz. glass jar	4 C	N
	P002-SS008-0001-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	13:25	1	4-oz. glass jar	4 C	N
	P002-SS008-0106-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	13:27	1	4-oz. glass jar	4 C	N
	P002-SS008-0612-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	13:29	1	4-oz. glass jar	4 C	N
	P002-SS008-1218-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	13:31	1	4-oz. glass jar	4 C	N
	P002-SS008-1824-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	13:32	1	4-oz. glass jar	4 C	N
	P002-SS009-0001-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	13:10	1	4-oz. glass jar	4 C	N
	P002-SS009-0106-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	13:11	1	4-oz. glass jar	4 C	N

**Special Instructions:** The following samples are designated for 250-micron sieving: P002-SS001-0001-001, P002-SS001-0002-001, P002-SS001-0003-001, P002-SS001-0004-001, P002-SS001-0005-001, P002-SS001-0006-001, P002-SS001-0007-001.

SAMPLES TRANSFERRED FROM \_\_\_\_\_  
CHAIN OF CUSTODY # \_\_\_\_\_

**SAMPLES TRANSFERRED**

SEP A

DateShipped: 4/2/2013

CarrierName: Hand-Delivery

Airbill No: N/A

CHAIN OF CUSTODY RECORD

R02\_Barth Smelting Corp./NJ

Contact Name: Scott Snyder

Contact phone: +32-3/0-4993

-040213-070554-0002  
Cooler #: Lab: DESA  
Lab Phone: 732-321-6707

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Numb	Container	Preservative	MS/MSD
						Cont			
	P002-SS009-0612-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	13:13	1	4-oz. glass jar	4 C	N
	P002-SS009-1218-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	13:15	1	4-oz. glass jar	4 C	N
	P002-SS009-1824-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	13:17	1	4-oz. glass jar	4 C	N
	P002-SS010-0001-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	12:55	1	4-oz. glass jar	4 C	N
	P002-SS010-0106-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	12:57	1	4-oz. glass jar	4 C	N
	P002-SS010-0612-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	12:59	1	4-oz. glass jar	4 C	N
	P002-SS010-1218-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	13:01	1	4-oz. glass jar	4 C	N
	P002-SS010-1824-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	13:03	1	4-oz. glass jar	4 C	N
	P002-SS011-0001-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	10:30	1	4-oz. glass jar	4 C	N
	P002-SS011-0106-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	10:35	1	4-oz. glass jar	4 C	N
	P002-SS011-0612-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	10:38	1	4-oz. glass jar	4 C	N

**Special Instructions:** The following samples are designated for 250-micron sieving: P002-SS001-0001-001, P002-SS003-0001-001, P002-SS004-0001-001, P002-SS005-0001-001, P002-SS006-0001-001, P002-SS007-0001-001, P002-SS011-0001-001, P002-SS014-0001-001, P002-SS016-0001-001, P002-SS019-0001-001, P002-SS012-0001-001, P002-SS023-0001-001, P002-SS013-0001-001, P002-SS010-0001-001, P002-SS009-0001-001, P002-SS008-0001-001.

## SAMPLES TRANSFERRED FROM

**CHAIN OF CUSTODY #**

USEPA

DateShipped: 4/2/2013

CarrierName: Hand-Delive

Airbill No: N/A

**CHAIN OF CUSTODY RECORD**

R02\_Barth Smelting Corp./NJ

Contact Name: Scott Snyder

Contract Blanno: 733 570-1983

Call: FIGURE. 132-510-4333

No. Z-040213-0 / 0334-0002

COOLER #:

Lab: DESA

-321-6707  
-ab. DLJA

Contact Phone: 732-570-4993

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
	P002-SS011-1218-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	10:40	1	4-oz. glass jar	4 C	N
	P002-SS011-1824-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	10:43	1	4-oz. glass jar	4 C	N
	P002-SS013-0001-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	12:35	1	4-oz. glass jar	4 C	N
	P002-SS013-0106-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	12:37	2	4-oz. glass jar	4 C	Y
	P002-SS013-0106-002	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	12:37	1	4-oz. glass jar	4 C	N
	P002-SS013-0612-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	12:42	1	4-oz. glass jar	4 C	N
	P002-SS013-1218-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	12:45	1	4-oz. glass jar	4 C	N
	P002-SS013-1824-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	12:47	1	4-oz. glass jar	4 C	N
	P002-SS014-0001-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	10:55	1	4-oz. glass jar	4 C	N
	P002-SS014-0106-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	10:57	1	4-oz. glass jar	4 C	N
	P002-SS014-0612-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	10:59	1	4-oz. glass jar	4 C	N

**Special Instructions:** The following samples are designated for 250-micron sieving: P002-SS001-0001-001, P002-SS004-0001-001, P002-SS005-0001-001, P002-SS006-0001-001, P002-SS007-0001-001.

#### SAMPLES TRANSFERRED FROM

## SAMPLES TRANSFERRED FROM

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DateShipped: 4/2/2013

CarrierName: Hand-De

באנטומיה של נשים

**CHAIN OF EVIDENCE RECORD**

R02\_Barth Smelting Corp./NJ

Contact Name: Scott Snyder

Gesetzliche Grundlagen

Contact Phone: 732-310-4993

No: 2-040213-070554-0002

Cooler #:

Lab: DESA

Lab Phone: 732-321-6707

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
	P002-SS014-1218-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	11:00	1	4-oz. glass jar	4 C	N
	P002-SS014-1824-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	11:02	1	4-oz. glass jar	4 C	N
	P002-SS016-0001-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	11:05	1	4-oz. glass jar	4 C	N
	P002-SS016-0106-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	11:10	1	4-oz. glass jar	4 C	N
	P002-SS016-0612-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	11:12	1	4-oz. glass jar	4 C	N
	P002-SS016-1218-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	11:14	1	4-oz. glass jar	4 C	N
	P002-SS016-1824-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	11:16	1	4-oz. glass jar	4 C	N
	P002-SS019-0001-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	11:23	1	4-oz. glass jar	4 C	N
	P002-SS019-0106-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	11:25	1	4-oz. glass jar	4 C	N
	P002-SS019-0612-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	11:28	1	4-oz. glass jar	4 C	N
	P002-SS019-1218-001	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	11:30	1	4-oz. glass jar	4 C	N

**Special Instructions:** The following samples are designated for 250-micron sieving: P002-SS001-0001-001, P002-SS002-0001-001, P002-SS003-0001-001, P002-SS004-0001-001, P002-SS005-0001-001, P002-SS006-0001-001, P002-SS007-0001-001

#### SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

USEPA

DateShipped: 4/2/2013

CarrierName: Hand-Deliver

Airbill No: N/A

**CHAIN OF CUSTODY RECORD**

R02\_Barth Smelting Corp./NJ

Contact Name: Scott Snyder

Contact Phone: 732-570-4993

No: 2-040213-070554-0002  
Cooler #: Lab: DESA

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
	P002-SS019-1824-	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	11:35	2	4-oz. glass jar	4 C	Y
001	P002-SS019-1824-	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	11:35	1	4-oz. glass jar	4 C	N
002	P002-SS021-0001-	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	11:45	1	4-oz. glass jar	4 C	N
001	P002-SS021-0106-	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	11:47	1	4-oz. glass jar	4 C	N
001	P002-SS021-0612-	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	11:50	1	4-oz. glass jar	4 C	N
001	P002-SS021-1218-	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	11:52	1	4-oz. glass jar	4 C	N
001	P002-SS021-1824-	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	11:54	1	4-oz. glass jar	4 C	N
001	P002-SS023-0001-	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	12:15	1	4-oz. glass jar	4 C	N
001	P002-SS023-0106-	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	12:17	1	4-oz. glass jar	4 C	N
001	P002-SS023-0612-	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	12:20	1	4-oz. glass jar	4 C	N
001	P002-SS023-1218-	TAL Metals (incl. Hg and Sn)	Soil	3/29/2013	12:22	1	4-oz. glass jar	4 C	N

**Special Instructions:** The following samples are designated for 250-micron sieving: P002-SS001-0001-001, P002-SS001-0001-001, P002-SS003-0001-001, P002-SS004-0001-001, P002-SS005-0001-001, P002-SS006-0001-001, P002-SS007-0001-001, P002-SS011-0001-001, P002-SS014-0001-001, P002-SS016-0001-001, P002-SS019-0001-001, P002-SS012-0001-001, P002-SS023-0001-001, P002-SS013-0001-001, P002-SS010-0001-001, P002-SS009-0001-001, P002-SS008-0001-001.

**SAMPLES TRANSFERRED FROM  
CHAMBER OF CULTIVATION #**

**CHAIN OF CUSTODY**

CSEPA

DateShinned: 4/2/2013

CarrierName: Hand-De

AirbillNo: N/A

**CHAIN OF CUSTODY RECORD**

No: 2-040213-070554-0002

Conular #:

ab: DESA

Lab Phone: 732-321-6707

**Special Instructions:** The following samples are designated for 250-micron sieving: P002-SS001-0001-001, P002-SS002-0001-001, P002-SS003-0001-001, P002-SS004-0001-001, P002-SS005-0001-001, P002-SS006-0001-001, P002-SS007-0001-001, P002-SS011-0001-001, P002-SS014-0001-001, P002-SS016-0001-001, P002-SS019-0001-001, P002-SS012-0001-001, SS023-0001-001, P002-SS013-0001-001, P002-SS010-0001-001, P002-SS009-0001-001, P002-SS008-0001-001.

SAMPLES TRANSFERRED FROM  
CHAIN OF CUSTODY #

USEPA

DateShipped: 4/2/2013

CarrierName: Hand-Deliver

AirbillNo: N/A

## CHAIN OF CUSTODY RECORD

R02\_Barth Smelting Corp./NJ

Contact Name: Scott Snyder

Contact Phone: 732-570-4993

No: 2-040213-081509-0003

Cooler#:

Lab: DESA

Lab Phone: 732-321-6707

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
/ 001	P002-SS012-0001-	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	11:35	1	4-oz. glass jar	4 C	N
001	P002-SS012-0106-	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	11:37	1	4-oz. glass jar	4 C	N
001	P002-SS012-0612-	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	11:39	1	4-oz. glass jar	4 C	N
001	P002-SS012-1218-	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	11:41	1	4-oz. glass jar	4 C	N
001	P002-SS012-1824-	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	11:43	1	4-oz. glass jar	4 C	N
001	P002-SS015-0001-	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	11:45	1	4-oz. glass jar	4 C	N
001	P002-SS015-0106-	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	11:48	1	4-oz. glass jar	4 C	N
001	P002-SS015-0612-	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	11:51	1	4-oz. glass jar	4 C	N
001	P002-SS015-1218-	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	11:53	1	4-oz. glass jar	4 C	N
001	P002-SS015-1824-	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	11:55	1	4-oz. glass jar	4 C	N
001	P002-SS017-0001-	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	11:58	1	4-oz. glass jar	4 C	N

Special Instructions: The following samples are designated for 250-micron sieving: P002-SS029-0001-001, P002-SS028-0306-001, P002-SS027-0306-001, P002-SS030-0306-001, P002-SS026-0306-001, P002-SS025-0306-001, P002-SS024-0001-001, P002-SS022-0001-001, P002-SS020-0001-001, P002-SS018-0001-001, P002-SS012-0001-001, P002-SS015-0001-001, P002-SS017-0001-001, P002-SS031-0001-001, P002-SS032-0001-001, P002-SS033-0001-001, P002-SS034-0001-001, P002-SS035-0001-001, P002-SS036-0001-001

## SAMPLES TRANSFERRED FROM

## CHAIN OF CUSTODY #

Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason	Relinquished By	Date	Received by	Date	Time
Los Angeles	<i>J.P.</i>	4/1/13	<i>John D.</i>	4/1/13	13:05						

Cooker #3 = 5.4°C on 100g  
Cooker #4 = 5.2°C on 100g  
4/1/13

5  
SEP

Scanned: 4/2/2013

Cartoonists: Hand Drawn

Call for Papers: India-Burma

**CHAIN OF CUSTODY RECORD**

R02 Barth Smelting Corp./N

Contact Name: Scott Snyder

Contact Phone: 732-570-4993

NO: Z-0402 | 3-08 | 003-0003

Cooler #:

Lab: DESA

Lab Phone: 732-321-6707

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
	P002-SS017-0106-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	12:00	1	4-oz. glass jar	4 C	N
	P002-SS017-0612-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	12:02	1	4-oz. glass jar	4 C	N
	P002-SS017-1218-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	12:04	1	4-oz. glass jar	4 C	N
	P002-SS017-1824-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	12:06	1	4-oz. glass jar	4 C	N
	P002-SS018-0001-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	11:15	1	4-oz. glass jar	4 C	N
	P002-SS018-0106-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	11:17	1	4-oz. glass jar	4 C	N
	P002-SS018-0612-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	11:19	1	4-oz. glass jar	4 C	N
	P002-SS018-1218-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	11:21	1	4-oz. glass jar	4 C	N
	P002-SS018-1824-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	11:23	1	4-oz. glass jar	4 C	N
	P002-SS020-0001-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	10:58	1	4-oz. glass jar	4 C	N
	P002-SS020-0106-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	11:00	1	4-oz. glass jar	4 C	N

**Special Instructions:** The following samples are designated for 250-micron sieving: P002-SS029-0001-001, P002-SS028-0306-001, P002-SS025-0306-001, P002-SS024-0001-001.

## SAMPLES TRANSFERRED FROM

**Special Instructions:** The following samples are designated for 250-micron sieving: P002-SS029-0001-001, P002-SS028-0306-001, P002-SS027-0306-001, P002-SS030-0306-001, P002-SS026-0306-001, P002-SS025-0306-001, P002-SS024-0001-001, P002-SS022-0001-001, P002-SS020-0001-001, P002-SS018-0001-001, P002-SS012-0001-001, P002-SS004-0001-001, P002-SS003-0001-001, P002-SS002-0001-001, P002-SS001-0001-001

Special Instructions: The following samples are designated for 250-micron sieving: P002-SS029-0001-001, P002-SS028-0306-001, P002-SS030-0306-001, P002-SS026-0306-001, P002-SS025-0306-001, P002-SS024-0001-001, P002-SS022-0001-001, P002-SS020-0001-001, P002-SS018-0001-001, P002-SS012-0001-001, P002-SS015-0001-001, P002-SS017-0001-001, P002-SS031-0001-001, P002-SS032-0001-001, P002-SS033-0001-001, P002-SS034-0001-001, P002-SS035-0001-001, P002-SS036-0001-001						
						SAMPLES TRANSFERRED FROM
Items/Reason	Relinquished by	Date	Received by	Date	Time	Items/Reason
Lod Analytics	<i>J.P.</i>	<i>4/2/13</i>	<i>J.P.</i>	<i>4/2/13</i>	<i>13:05</i>	Relinquished By
						Date
						Received by
						Date
						Time

USEPA

DateShipped: 4/2/2013

CarrierName: Hand-De

AirbillNo: N/A

**CHAIN OF CUSTODY RECORD**

NO: Z-040213-001303-0003

Cooler #:

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Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
	P002-SS020-0612-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	11:02	1	4-oz. glass jar	4 C	N
	P002-SS020-1218-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	11:04	1	4-oz. glass jar	4 C	N
	P002-SS020-1824-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	11:06	1	4-oz. glass jar	4 C	N
	P002-SS022-0001-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	10:44	1	4-oz. glass jar	4 C	N
	P002-SS022-0106-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	10:46	1	4-oz. glass jar	4 C	N
	P002-SS022-0612-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	10:48	1	4-oz. glass jar	4 C	N
	P002-SS022-1218-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	10:50	1	4-oz. glass jar	4 C	N
	P002-SS022-1824-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	10:51	1	4-oz. glass jar	4 C	N
	P002-SS024-0001-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	10:25	1	4-oz. glass jar	4 C	N
	P002-SS024-0106-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	10:27	1	4-oz. glass jar	4 C	N
	P002-SS024-0612-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	10:30	1	4-oz. glass jar	4 C	N

**Special Instructions:** The following samples are designated for 250-micron sieving: P002-SS029-0001-001, P002-SS028-0306-001, P002-SS027-0306-001, P002-SS030-0306-001, P002-SS026-0306-001, P002-SS025-0306-001, P002-SS024-0001-001, P002-SS023-0001-001, P002-SS020-0001-001, P002-SS018-0001-001, P002-SS012-0001-001, P002-SS015-0001-001, P002-SS014-0001-001.

**SAMPLES TRANSFERRED FROM**

**SAMPLES TRANSFER**

USEPA

DateShipped: 4/2/2013

CarrierName: Hand-De

AirbillNG: N/A

**CHAIN OF CUSTODY RECORD**

R02\_Barth Smelting Corp./NJ

Contact Name: Scott Snyder

Contact Phone: 732-570-4993

2-040213-081509-0003  
Cooler #: Lab: DESA

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
	P002-SS024-1218-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	10:30	1	4-oz. glass jar	4 C	N
	P002-SS024-1824-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	10:35	1	4-oz. glass jar	4 C	N
	P002-SS025-0306-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	10:05	1	4-oz. glass jar	4 C	N
	P002-SS025-0612-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	10:07	1	4-oz. glass jar	4 C	N
	P002-SS025-1218-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	10:10	1	4-oz. glass jar	4 C	N
	P002-SS025-1824-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	10:12	2	4-oz. glass jar	4 C	Y
	P002-SS025-1824-002	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	10:12	1	4-oz. glass jar	4 C	N
	P002-SS026-0306-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	09:45	1	4-oz. glass jar	4 C	N
/	P002-SS026-0612-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	09:47	1	4-oz. glass jar	4 C	N
	P002-SS026-1218-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	09:49	1	4-oz. glass jar	4 C	N
	P002-SS026-1824-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	09:55	1	4-oz. glass jar	4 C	N

**Special Instructions:** The following samples are designated for 250-micron sieving: P002-SS029-0001-001, P002-SS028-0306-001, P002-SS027-0306-001, P002-SS030-0306-001, P002-SS026-0306-001, P002-SS025-0306-001, P002-SS024-0001-001, P002-SS022-0001-001, P002-SS020-0001-001, P002-SS018-0001-001, P002-SS012-0001-001, P002-SS015-0001-001, P002-SS017-0001-001, P002-SS031-0001-001, P002-SS032-0001-001, P002-SS033-0001-001, P002-SS034-0001-001, P002-SS035-0001-001, P002-SS036-0001-001

#### SAMPLES TRANSFERRED FROM

## SAMPLES TRANSFERRED FROM

USEPA

DateShipped: 4/2/2013

CarrierName: Hand-Deliver

**CHAIN OF CUSTODY RECORD**

R02 Barth Smelting Corp./NJ

Contact Name: Scott Snyder

Contact Phone: 732-570-4993

No: 2-040213-081509-0003  
Cooler #: Lab: DESA

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
/	P002-SS027-0306-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	08:50	1	4-oz. glass jar	4 C	N
	P002-SS027-0612-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	08:52	2	4-oz. glass jar	4 C	Y
	P002-SS027-0612-002	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	08:52	1	4-oz. glass jar	4 C	N
	P002-SS027-1218-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	09:00	1	4-oz. glass jar	4 C	N
	P002-SS027-1824-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	09:05	1	4-oz. glass jar	4 C	N
	P002-SS028-0306-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	08:30	1	4-oz. glass jar	4 C	N
	P002-SS028-0612-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	08:40	2	4-oz. glass jar	4 C	Y
	P002-SS028-0612-002	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	08:40	1	4-oz. glass jar	4 C	N
	P002-SS028-1218-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	08:43	1	4-oz. glass jar	4 C	N
	P002-SS028-1824-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	08:45	1	4-oz. glass jar	4 C	N
	P002-SS029-0001-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	08:15	1	4-oz. glass jar	4 C	N

**Special Instructions:** The following samples are designated for 250-micron sieving: P002-SS029-0001-001, P002-SS028-0306-001, P002-SS025-0306-001, P002-SS024-0001-001.

#### SAMPLES TRANSFERRED FROM

**Special Instructions:** The following samples are designated for 250-micron sieving: P002-SS029-0001-001, P002-SS028-0306-001, P001, P002-SS027-0306-001, P002-SS030-0306-001, P002-SS026-0306-001, P002-SS025-0306-001, P002-SS024-0001-001, P002-SS022-0001-001, P002-SS020-0001-001, P002-SS018-0001-001, P002-SS012-0001-001, P002-SS015-0001-001, P002-SS017-0001-001, P002-SS031-0001-001, P002-SS032-0001-001, P002-SS033-0001-001, P002-SS034-0001-001, P002-SS035-0001-001.

Special Instructions: The following samples are designated for 250-micron sieving: P002-SS029-0001-001, P002-SS028-0306-001, P002-SS027-0306-001, P002-SS030-0306-001, P002-SS026-0306-001, P002-SS025-0306-001, P002-SS024-0001-001, P002-SS022-0001-001, P002-SS020-0001-001, P002-SS018-0001-001, P002-SS012-0001-001, P002-SS015-0001-001, P002-SS017-0001-001, P002-SS031-0001-001, P002-SS032-0001-001, P002-SS033-0001-001, P002-SS034-0001-001, P002-SS035-0001-001, P002-SS036-0001-001						
<b>SAMPLES TRANSFERRED FROM</b>						
<b>CHAIN OF CUSTODY #</b>						

1180

DateShipped: 4/2/2013

CarrierName: Hand-D

Airline: MA

CHAIN OF CUSTODY RECORD

R02\_Barth Smelting Corp./NJ

Contact Name: Scott Snyder

Compton, California 90220

Contact PhoE: 132-370-4993

No: 2-040213-081509-0003  
Cooler #: \_\_\_\_\_  
Lab: DESA

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
	P002-SS029-0106-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	08:17	2	4-oz. glass jar	4 C	Y
	P002-SS029-0106-002	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	08:17	1	4-oz. glass jar	4 C	N
	P002-SS029-0612-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	08:21	1	4-oz. glass jar	4 C	N
	P002-SS029-1218-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	08:23	1	4-oz. glass jar	4 C	N
	P002-SS029-1824-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	08:25	1	4-oz. glass jar	4 C	N
	P002-SS030-0306-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	09:15	1	4-oz. glass jar	4 C	N
	P002-SS030-0612-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	09:18	1	4-oz. glass jar	4 C	N
	P002-SS030-1218-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	09:20	1	4-oz. glass jar	4 C	N
	P002-SS030-1824-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	09:23	1	4-oz. glass jar	4 C	N
	P002-SS031-0001-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	13:28	1	4-oz. glass jar	4 C	N
	P002-SS031-0106-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	13:30	2	4-oz. glass jar	4 C	Y

Special Instructions: The following samples are designated for 250-micron sieving: P002-SS029-0001-001, P002-SS028-0306-001, P002-SS027-0306-001, P002-SS030-0306-001, P002-SS026-0306-001, P002-SS025-0306-001, P002-SS024-0001-001, P002-SS022-0001-001, P002-SS020-0001-001, P002-SS018-0001-001, P002-SS012-0001-001, P002-SS015-0001-001, P002-SS017-0001-001, P002-SS031-0001-001, P002-SS032-0001-001, P002-SS033-0001-001, P002-SS034-0001-001, P002-SS035-0001-001, P002-SS036-0001-001

## SAMPLES TRANSFERRED FROM

**CHAIN OF CUSTODY**

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DateShipped: 4/2/2013

CarrierName: Hand-Del

AirbillNo: N/A

CHAIN OF CUSTODY RECORD

NO. 2-040213-90133-333

388-2200

Lab. DESA  
2-321-6707

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R02\_Barth Smelting Corp./NJ  
Contact Name: Scott Snyder  
Contact Phone: 732-570-4993

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
	P002-SS031-0106-002	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	13:30	1	4-oz. glass jar	4 C	N
	P002-SS032-0001-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	13:51	1	4-oz. glass jar	4 C	N
	P002-SS032-0106-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	13:52	1	4-oz. glass jar	4 C	N
	P002-SS033-0001-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	14:03	1	4-oz. glass jar	4 C	N
	P002-SS033-0106-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	14:05	1	4-oz. glass jar	4 C	N
	P002-SS034-0001-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	14:15	1	4-oz. glass jar	4 C	N
	P002-SS034-0106-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	14:16	1	4-oz. glass jar	4 C	N
	P002-SS035-0001-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	14:26	1	4-oz. glass jar	4 C	N
	P002-SS035-0106-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	14:27	1	4-oz. glass jar	4 C	N
	P002-SS036-0001-001	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	14:39	1	4-oz. glass jar	4 C	N
001	P002-SS036-0106-	TAL Metals (incl. Hg and Sn)	Soil	4/1/2013	14:40	1	4-oz. glass jar	4 C	N

#### SAMPLES TRANSFERRED FROM

CHAIN OF CUSTODY #

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Special Instructions: The following samples are designated for 250-micron sieving: P002-SS029-0001-001, P002-SS028-0306-001, P002-SS027-0306-001, P002-SS030-0306-001, P002-SS026-0306-001, P002-SS025-0306-001, P002-SS024-0001-001, P002-SS022-0001-001, P002-SS020-0001-001, P002-SS018-0001-001, P002-SS012-0001-001, P002-SS015-0001-001, P002-SS017-0001-001, P002-SS031-0001-001, P002-SS032-0001-001, P002-SS033-0001-001, P002-SS034-0001-001, P002-SS035-0001-001, P002-SS036-0001-001						
<b>SAMPLES TRANSFERRED FROM</b>						
<b>CHAIN OF CUSTODY #</b>						

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DateShipped: 4/2/2013

CarrierName: Hand-Del

Airbill No: N/A

**CHAIN OF CUSTODY RECORD**

No: 2-040213-081509-0003

Cooler #:

Lab: DESA

32-321-6707

R02\_Ballot\_Signing\_Corp, NJ  
Contact Name: Scott Snyder  
Contact Phone: 732-570-4993

Lab #	Sample #	Analyses	Matrix	Collected	Sample Time	Numb Cont	Container	Preservative	MS/MSD
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A hand-drawn graph on grid paper illustrating a linear relationship. The graph features a single straight line with a positive slope. The line intersects the vertical y-axis at a point labeled '1'. It also intersects the horizontal x-axis at a point labeled '2'. A third point on the line is labeled '3'. The graph is drawn with a black pen or pencil on white grid paper.

**Special Instructions:** The following samples are designated for 250-micron sieving: P002-SS029-0001-001, P002-SS028-006-001, P002-SS027-0306-001, P002-SS030-0306-001, P002-SS025-0306-001, P002-SS022-0001-001, P002-SS018-0001-001, P002-SS012-0001-001, P002-SS017-0001-001, P002-SS031-0001-001, P002-SS032-0001-001, P002-SS033-0001-001, P002-SS034-0001-001, P002-SS035-

**SAMPLES TRANSFERRED FROM**

CHAIN OF CUSTODY #

**USEPA**

Weston Solutions, Inc.: RST2

Carrier Name: Hand Delivery

Date Delivered: 5/17/2013

**CHAIN OF CUSTODY RECORD****No: 2-051713-103100-0004**

Cooler #:

Lab: DESA EPA Region 2

Lab Phone: 732-321-6707

Barth Smelting Site  
Contact Name: Mike Garibaldi  
Contact Phone: 732-585-4419

<b>Lab #</b>	<b>Sample #</b>	<b>Collected</b>	<b>Sample Time</b>	<b>Location</b>	<b>Matrix</b>	<b>Numb Cont</b>	<b>Container</b>	<b>Preservative</b>	<b>MS/MSD</b>	<b>Analyses</b>
P002-SS037-0612-001	5/15/2013	09:45	P002-SS037	Soil	1	8-oz. glass jar	4 C	N	TAL Metals (incl. Hg and Sn)	
P002-SS038-0106-001	5/15/2013	09:37	P002-SS038	Soil	1	8-oz. glass jar	4 C	N	TAL Metals (incl. Hg and Sn)	
P002-SS042-0106-001	5/15/2013	11:00	P002-SS042	Soil	1	8-oz. glass jar	4 C	N	TAL Metals (incl. Hg and Sn)	
P002-SS043-0612-001	5/15/2013	11:36	P002-SS043	Soil	1	8-oz. glass jar	4 C	N	TAL Metals (incl. Hg and Sn)	
P002-SS045-0106-001	5/15/2013	12:04	P002-SS045	Soil	2	8-oz. glass jar	4 C	Y	TAL Metals (incl. Hg and Sn)	
P002-SS045-0106-002	5/15/2013	12:08	P002-SS045	Soil	1	8-oz. glass jar	4 C	N	TAL Metals (incl. Hg and Sn)	
P002-SS049-0612-001	5/15/2013	13:41	P002-SS049	Soil	1	8-oz. glass jar	4 C	N	TAL Metals (incl. Hg and Sn)	
P002-SS052-0106-001	5/16/2013	09:10	P002-SS052	Soil	1	8-oz. glass jar	4 C	N	TAL Metals (incl. Hg and Sn)	
P002-SS054-0001-001	5/16/2013	09:12	P002-SS054	Soil	1	8-oz. glass jar	4 C	N	TAL Metals (incl. Hg and Sn)	
P002-SS059-0001-001	5/16/2013	12:40	P002-SS059	Soil	1	8-oz. glass jar	4 C	N	TAL Metals (incl. Hg and Sn)	
P002-SS060-0612-001	5/16/2013	11:20	P002-SS060	Soil	1	8-oz. glass jar	4 C	N	TAL Metals (incl. Hg and Sn)	
P002-SS061-0612-001	5/16/2013	11:36	P002-SS061	Soil	1	8-oz. glass jar	4 C	N	TAL Metals (incl. Hg and Sn)	
P002-SS066-0612-001	5/16/2013	14:40	P002-SS066	Soil	1	8-oz. glass jar	4 C	N	TAL Metals (incl. Hg and Sn)	
P002-SS068-12/18-001	5/16/2013	16:00	P002-SS068	Soil	1	8-oz. glass jar	4 C	N	TAL Metals (incl. Hg and Sn)	
RB-051513	5/15/2013	16:30	N/A	DI Water	1	1 L poly	HNO3 pH<2	N	TAL Metals (incl. Hg and Sn)	
RB-051613	5/16/2013	16:30	N/A	DI Water	1	1 L poly	HNO3 pH<2	N	TAL Metals (incl. Hg and Sn)	

Special Instructions: Sample Nos. P002-SS054-0001-001 and P002-SS059-0001-001 are designated for 250-micron sieving.

**SAMPLES TRANSFERRED FROM  
CHAIN OF CUSTODY #**

<b>Items/Reason</b>	<b>Relinquished by</b>	<b>Date</b>	<b>Received By</b>	<b>Date</b>	<b>Time</b>	<b>Items/Reason</b>	<b>Relinquished By</b>	<b>Date</b>	<b>Received by</b>	<b>Date</b>	<b>Time</b>
<i>All samples / Midkittah 5/17/13</i>	<i>[Signature]</i>	<i>5/17/13</i>			<i>11:30</i>						

Temp = 9.2°C on 100g ± 5/17/13

## **ATTACHMENT D**

Regression Analysis Graph  
(Correlation of XRF and Laboratory Data)

**Correlation of XRF and Laboratory Data  
Barth Smelting Corp. - Property P002 (Terrell Homes)  
May 2013 Sampling Event**

