153525

Case Narrative:
Raritan Bay Slag #09040072

The National Environmental Laboratory Accreditation Conference (NELAC) is a voluntary environmental laboratory accreditation association of State and Federal agencies. NELAC established and promoted a national accreditation program 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 NELAC accredited. The Laboratory tests that are accredited have met all the requirements established under the NELAC Standards.

Commeht(s):

The Leaching Procedure used, Synthetic Precipitation Leaching Procedure (SPLP), is based on EPA SW 846 Method 1312.

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 Contract Required Quantitation Limits (CRQLs), where applicable, for each analyte requested.

Method(s):

All methods that are NELAC accredited in the Laboratory are noted with "NELAC" at the end of the method reference.

- Mercury Analysis, EPA SOP C-110 (CVAAS Method)
- TAL Metal Analysis, EPA SOP C-109 (ICP-AES Method)

Approval: Kim Brooks-Byrle Date: 5/21/09

U.S. Environmental Protection Agency
Region 2 Laboratory
2890 Woodbridge Avenue
Edison, NJ 08837

Data Report: RARITAN BAY SLAG

Project Number: **09040072**

Program: **Y206**

Project Leader: ANDREW CONFORTINI

Remark Codes	Explanation
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.
UJ	THE ANALYTE WAS NOT DETECTED AT OR ABOVE THE REPORTING LIMIT. THE REPORTING LIMIT IS AN ESTIMATE.
N	THERE IS PRESUMPTIVE EVIDENCE THAT THE ANALYTE IS PRESENT; THE ANALYTE IS REPORTED AS A TENTATIVE IDENTIFICATION.
NJ	THERE IS PRESUMPTIVE EVIDENCE THAT THE ANALYTE IS PRESENT; THE ANALYTE IS REPORTED AS A TENTATIVE IDENTIFICATION. THE REPORTED VALUE IS AN ESTIMATE.
R	THE PRESENCE OR ABSENCE OF THE ANALYTE CANNOT BE DETERMINED FROM THE DATA DUE TO SEVERE QUALITY CONTROL PROBLEMS. THE DATA ARE REJECTED AND CONSIDERED UNUSABLE.
K	THE IDENTIFICATION OF THE ANALYTE IS ACCEPTABLE; THE REPORTED VALUE MAY BE BIASED HIGH. THE ACTUAL VALUE IS EXPECTED TO BE LESS THAN THE REPORTED VALUE.
L	THE IDENTIFICATION OF THE ANALYTE IS ACCEPTABLE; THE REPORTED VALUE MAY BE BIASED LOW. THE ACTUAL VALUE IS EXPECTED TO BE GREATER THAN THE REPORTED VALUE.
NV	NOT VALIDATED
INC	RESULT NOT ENTERED

U.S. EPA Region 2 Laboratory
Data Report

Survey Name: RARITAN BAY SLAG

Project Number: 09040072

*Sorted By Sample ID

AL02729 Field/Station ID: OBBC
Matrix: Other

Date Received: 4/24/2009

Sample Description:

Analysis Type: METALS TAL ICP SOLID

CAS Number	Analyte Name	Result	Remark Codes	Units
7440-22-4	SILVER	---	0.54U	mg/Kg
7429-90-5	ALUMINUM	38		mg/Kg
7440-38-2	ARSENIC	---	0.86U	mg/Kg
7440-39-3	BARIUM	---	11U	mg/Kg
7440-41-7	BERYLLIUM	---	0.32U	mg/Kg
7440-70-2	CALCIUM	1,000		mg/Kg
7440-43-9	CADMIUM	---	0.32U	mg/Kg
7440-48-4	COBALT	---	2.1U	mg/Kg
7440-47-3	CHROMIUM	---	0.54U	mg/Kg
7440-50-8	COPPER	---	1.1U	mg/Kg
7439-89-6	IRON	140		mg/Kg
7440-09-7	POTASSIUM	---	54U	mg/Kg
7439-95-4	MAGNESIUM(2852)	---	54U	mg/Kg
7439-96-5	MANGANESE	1.7		mg/Kg
7440-23-5	SODIUM	---	110U	mg/Kg
7440-02-0	NICKEL	---	2.1U	mg/Kg
7439-92-1	LEAD	4.3		mg/Kg
7782-49-2	SELENIUM	---	2.1U	mg/Kg
7440-36-0	ANTIMONY	---	2.1U	mg/Kg
7440-28-0	THALLIUM	---	2.1U	mg/Kg
7440-62-2	VANADIUM	---	2.1U	mg/Kg
7440-66-6	ZINC	---	2.1U	mg/Kg

Single Component Analyses

CAS Number	Analyte Name	Result	Remark Codes	Units
7439-97-6	MERCURY	---	0.015U	mg/Kg
7439-97-6	MERCURY, SPLP	---	0.0020U	mg/L

Analysis Type: METALS, SPLP ICP SPLP EXTRACT

CAS Number	Analyte Name	Result	Remark Codes	Units
7440-22-4	SILVER, SPLP	---	0.050U	mg/L
7440-38-2	ARSENIC, SPLP	---	0.080U	mg/L
7440-39-3	BARIUM, SPLP	---	1.0U	mg/L
7440-43-9	CADMIUM, SPLP	---	0.030U	mg/L
7440-47-3	CHROMIUM, SPLP	---	0.10U	mg/L
7439-92-1	LEAD, SPLP	---	0.080U	mg/L
7782-49-2	SELENIUM, SPLP	---	0.20U	mg/L

Refer to Page 1 for an explanation of Remark Codes

U.S. EPA Region 2 Laboratory
Data Report

Survey Name: RARITAN BAY SLAG

Project Number: 09040072

*Sorted By Sample ID

AL02730 Field/Station ID: JBEI Date Received: 4/24/2009
Matrix: Other

Sample Description:

Analysis Type: METALS TAL ICP SOLID

CAS Number	Analyte Name	Result	Remark Codes	Units
7440-22-4	SILVER	---	0.47U	mg/Kg
7429-90-5	ALUMINUM	35		mg/Kg
7440-38-2	ARSENIC	---	0.75U	mg/Kg
7440-39-3	BARIUM	---	9.4U	mg/Kg
7440-41-7	BERYLLIUM	---	0.28U	mg/Kg
7440-70-2	CALCIUM	320		mg/Kg
7440-43-9	CADMIUM	---	0.28U	mg/Kg
7440-48-4	COBALT	---	1.9U	mg/Kg
7440-47-3	CHROMIUM	---	0.47U	mg/Kg
7440-50-8	COPPER	---	0.94U	mg/Kg
7439-89-6	IRON	150		mg/Kg
7440-09-7	POTASSIUM	---	47U	mg/Kg
7439-95-4	MAGNESIUM(2852)	---	47U	mg/Kg
7439-96-5	MANGANESE	1.2		mg/Kg
7440-23-5	SODIUM	---	94U	mg/Kg
7440-02-0	NICKEL	---	1.9U	mg/Kg
7439-92-1	LEAD	1.7		mg/Kg
7782-49-2	SELENIUM	---	1.9U	mg/Kg
7440-36-0	ANTIMONY	---	1.9U	mg/Kg
7440-28-0	THALLIUM	---	1.9U	mg/Kg
7440-62-2	VANADIUM	---	1.9U	mg/Kg
7440-66-6	ZINC	31		mg/Kg

Single Component Analyses

CAS Number	Analyte Name	Result	Remark Codes	Units
7439-97-6	MERCURY	0.017		mg/Kg
7439-97-6	MERCURY, SPLP	---	0.0020U	mg/L

Analysis Type: METALS, SPLP ICP SPLP EXTRACT

CAS Number	Analyte Name	Result	Remark Codes	Units
7440-22-4	SILVER, SPLP	---	0.050U	mg/L
7440-38-2	ARSENIC, SPLP	---	0.080U	mg/L
7440-39-3	BARIUM, SPLP	---	1.0U	mg/L
7440-43-9	CADMIUM, SPLP	---	0.030U	mg/L
7440-47-3	CHROMIUM, SPLP	---	0.10U	mg/L
7439-92-1	LEAD, SPLP	---	0.080U	mg/L
7782-49-2	SELENIUM, SPLP	---	0.20U	mg/L

Refer to Page 1 for an explanation of Remark Codes

U.S. EPA Region 2 Laboratory
Data Report

Survey Name: RARITAN BAY SLAG

Project Number: 09040072

*Sorted By Sample ID

AL02731 Field/Station ID: RELJ
Matrix: Other

Date Received: 4/24/2009

Sample Description:

Analysis Type: METALS TAL ICP SOLID

CAS Number	Analyte Name	Result	Remark Codes	Units
7440-22-4	SILVER	---	0.41U	mg/Kg
7429-90-5	ALUMINUM	60		mg/Kg
7440-38-2	ARSENIC	---	0.66U	mg/Kg
7440-39-3	BARIUM	---	8.2U	mg/Kg
7440-41-7	BERYLLIUM	---	0.25U	mg/Kg
7440-70-2	CALCIUM	230		mg/Kg
7440-43-9	CADMIUM	---	0.25U	mg/Kg
7440-48-4	COBALT	---	1.6U	mg/Kg
7440-47-3	CHROMIUM	---	0.41U	mg/Kg
7440-50-8	COPPER	5.9		mg/Kg
7439-89-6	IRON	200		mg/Kg
7440-09-7	POTASSIUM	---	41U	mg/Kg
7439-95-4	MAGNESIUM(2852)	---	41U	mg/Kg
7439-96-5	MANGANESE	1.5		mg/Kg
7440-23-5	SODIUM	---	82U	mg/Kg
7440-02-0	NICKEL	---	1.6U	mg/Kg
7439-92-1	LEAD	170		mg/Kg
7782-49-2	SELENIUM	---	1.6U	mg/Kg
7440-36-0	ANTIMONY	---	1.6U	mg/Kg
7440-28-0	THALLIUM	---	1.6U	mg/Kg
7440-62-2	VANADIUM	---	1.6U	mg/Kg
7440-66-6	ZINC	---	1.6U	mg/Kg

Single Component Analyses

CAS Number	Analyte Name	Result	Remark Codes	Units
7439-97-6	MERCURY	---	0.015U	mg/Kg
7439-97-6	MERCURY, SPLP	---	0.0020U	mg/L

Analysis Type: METALS, SPLP ICP SPLP EXTRACT

CAS Number	Analyte Name	Result	Remark Codes	Units
7440-22-4	SILVER, SPLP	---	0.050U	mg/L
7440-38-2	ARSENIC, SPLP	---	0.080U	mg/L
7440-39-3	BARIUM, SPLP	---	1.0U	mg/L
7440-43-9	CADMIUM, SPLP	---	0.030U	mg/L
7440-47-3	CHROMIUM, SPLP	---	0.10U	mg/L
7439-92-1	LEAD, SPLP	0.16		mg/L
7782-49-2	SELENIUM, SPLP	---	0.20U	mg/L

Project Approval: Kim Brouder Boyle **Date:** 5/21/09

Refer to Page 1 for an explanation of Remark Codes

Report Date: 5/15/2009 3:08PM