Analytical and Quality Control Report

Doug Solon
ASARCO Texas Custodial Trust

P. O. Box 1111
El Paso, TX, 79999

Report Date: July 26, 2010
Work Order: 10072308

Project Location: El Paso, Texas
Project Name: Former ASARCO Smelter
Project Number: Former ASARCO Smelter

Enclosed are the Analytical Report and Quality Control Report for the following sample(s) submitted to TraceAnalysis, Inc.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Description</th>
<th>Matrix</th>
<th>Date Taken</th>
<th>Time Taken</th>
<th>Date Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>258343</td>
<td>SW Pond A</td>
<td>water</td>
<td>2010-07-20</td>
<td>14:15</td>
<td>2010-07-21</td>
</tr>
</tbody>
</table>

These results represent only the samples received in the laboratory. The Quality Control Report is generated on a batch basis. All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

This report consists of a total of 22 pages and shall not be reproduced except in its entirety, without written approval of TraceAnalysis, Inc.
**Standard Flags**

**B** - The sample contains less than ten times the concentration found in the method blank.
Case Narrative

Samples for project Former ASARCO Smelter were received by TraceAnalysis, Inc. on 2010-07-21 and assigned to work order 10072308. Samples for work order 10072308 were received intact at a temperature of 3.0 °C.

Samples were analyzed for the following tests using their respective methods.

<table>
<thead>
<tr>
<th>Test</th>
<th>Method</th>
<th>Prep Batch</th>
<th>Prep Date</th>
<th>QC Batch</th>
<th>Analysis Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag, Total</td>
<td>S 6010C</td>
<td>61722</td>
<td>2010-07-26 at 10:13</td>
<td>72032</td>
<td>2010-07-26 at 11:21</td>
</tr>
<tr>
<td>As, Total</td>
<td>S 6010C</td>
<td>61722</td>
<td>2010-07-26 at 10:13</td>
<td>72032</td>
<td>2010-07-26 at 11:21</td>
</tr>
<tr>
<td>Ba, Total</td>
<td>S 6010C</td>
<td>61722</td>
<td>2010-07-26 at 10:13</td>
<td>72032</td>
<td>2010-07-26 at 11:21</td>
</tr>
<tr>
<td>Cd, Total</td>
<td>S 6010C</td>
<td>61722</td>
<td>2010-07-26 at 10:13</td>
<td>72032</td>
<td>2010-07-26 at 11:21</td>
</tr>
<tr>
<td>Cr, Total</td>
<td>S 6010C</td>
<td>61722</td>
<td>2010-07-26 at 10:13</td>
<td>72032</td>
<td>2010-07-26 at 11:21</td>
</tr>
<tr>
<td>Cu, Total</td>
<td>S 6010C</td>
<td>61722</td>
<td>2010-07-26 at 10:13</td>
<td>72032</td>
<td>2010-07-26 at 11:21</td>
</tr>
<tr>
<td>Hg, Total</td>
<td>S 6470A</td>
<td>61732</td>
<td>2010-07-26 at 13:04</td>
<td>72047</td>
<td>2010-07-26 at 14:18</td>
</tr>
<tr>
<td>Mn, Total</td>
<td>S 6010C</td>
<td>61722</td>
<td>2010-07-26 at 10:13</td>
<td>72032</td>
<td>2010-07-26 at 11:21</td>
</tr>
<tr>
<td>Ni, Total</td>
<td>S 6010C</td>
<td>61722</td>
<td>2010-07-26 at 10:13</td>
<td>72032</td>
<td>2010-07-26 at 11:21</td>
</tr>
<tr>
<td>Pb, Total</td>
<td>S 6010C</td>
<td>61722</td>
<td>2010-07-26 at 10:13</td>
<td>72032</td>
<td>2010-07-26 at 11:21</td>
</tr>
<tr>
<td>Se, Total</td>
<td>S 6010C</td>
<td>61722</td>
<td>2010-07-26 at 10:13</td>
<td>72032</td>
<td>2010-07-26 at 11:21</td>
</tr>
<tr>
<td>Zn, Total</td>
<td>S 6010C</td>
<td>61722</td>
<td>2010-07-26 at 10:13</td>
<td>72032</td>
<td>2010-07-26 at 11:21</td>
</tr>
</tbody>
</table>

Results for these samples are reported on a wet weight basis unless data package indicates otherwise.

A matrix spike (MS) and matrix spike duplicate (MSD) sample is chosen at random from each preparation batch. The MS and MSD will indicate if a site specific matrix problem is occurring, however, it may not pertain to the samples for work order 10072308 since the sample was chosen at random. Therefore, the validity of the analytical data reported has been determined by the laboratory control sample (LCS) and the method blank (MB). These quality control measures are performed with each preparation batch to ensure data integrity.

All other exceptions associated with this report have been footnoted on the appropriate analytical page to assist in general data comprehension. Please contact the laboratory directly if there are any questions regarding this project.
# Analytical Report

## Sample: 238343 - SW Pond A

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Flag</th>
<th>Result</th>
<th>Units</th>
<th>Dilution</th>
<th>RL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Silver</td>
<td></td>
<td>&lt;0.00500</td>
<td>mg/L</td>
<td>1</td>
<td>0.00500</td>
</tr>
</tbody>
</table>

## Sample: 238343 - SW Pond A

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Flag</th>
<th>Result</th>
<th>Units</th>
<th>Dilution</th>
<th>RL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Arsenic</td>
<td></td>
<td>0.0700</td>
<td>mg/L</td>
<td>1</td>
<td>0.0100</td>
</tr>
</tbody>
</table>

## Sample: 238343 - SW Pond A

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Flag</th>
<th>Result</th>
<th>Units</th>
<th>Dilution</th>
<th>RL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Barium</td>
<td></td>
<td>0.0500</td>
<td>mg/L</td>
<td>1</td>
<td>0.0100</td>
</tr>
</tbody>
</table>

---

*continued ...*
sample 2383/3 continued . . .

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Flag</th>
<th>Result</th>
<th>Units</th>
<th>Dilution</th>
<th>RL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cadmium</td>
<td></td>
<td>0.0300</td>
<td>mg/L</td>
<td>1</td>
<td>0.00500</td>
</tr>
</tbody>
</table>

**Sample: 238343 - SW Pond A**

Laboratory: Lubbock  
Analysis: Cr, Total  
Analytical Method: S 6010C  
Prep Method: S 3010A  
QC Batch: 72032  
Date Analyzed: 2010-07-26  
Analyzed By: RR  
Prep Batch: 61722  
Sample Preparation: 2010-07-26  
Prepared By: KV

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Flag</th>
<th>Result</th>
<th>Units</th>
<th>Dilution</th>
<th>RL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Chromium</td>
<td></td>
<td>&lt;0.0100</td>
<td>mg/L</td>
<td>1</td>
<td>0.0100</td>
</tr>
</tbody>
</table>

**Sample: 238343 - SW Pond A**

Laboratory: Lubbock  
Analysis: Cu, Total  
Analytical Method: S 6010C  
Prep Method: S 3010A  
QC Batch: 72032  
Date Analyzed: 2010-07-26  
Analyzed By: RR  
Prep Batch: 61722  
Sample Preparation: 2010-07-26  
Prepared By: KV

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Flag</th>
<th>Result</th>
<th>Units</th>
<th>Dilution</th>
<th>RL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Copper</td>
<td></td>
<td>0.354</td>
<td>mg/L</td>
<td>1</td>
<td>0.00500</td>
</tr>
</tbody>
</table>

**Sample: 238343 - SW Pond A**

Laboratory: Lubbock  
Analysis: Hg, Total  
Analytical Method: S 7470A  
Prep Method: N/A  
QC Batch: 72047  
Date Analyzed: 2010-07-26  
Analyzed By: TP  
Prep Batch: 61732  
Sample Preparation: 2010-07-26  
Prepared By: TP

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Flag</th>
<th>Result</th>
<th>Units</th>
<th>Dilution</th>
<th>RL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Mercury</td>
<td></td>
<td>0.000310</td>
<td>mg/L</td>
<td>1</td>
<td>0.000200</td>
</tr>
</tbody>
</table>
Sample: 238343 - SW Pond A

Laboratory: Lubbock
Analysis: Mn, Total
QC Batch: 72032
Prep Batch: 61722

### Parameter | Flag | Result | Units | Dilution | RL
---|---|---|---|---|---
Total Manganese | | 0.0940 | mg/L | 1 | 0.00500

Sample: 238343 - SW Pond A

Laboratory: Lubbock
Analysis: Ni, Total
QC Batch: 72032
Prep Batch: 61722

### Parameter | Flag | Result | Units | Dilution | RL
---|---|---|---|---|---
Total Nickel | | <0.0100 | mg/L | 1 | 0.0100

Sample: 238343 - SW Pond A

Laboratory: Lubbock
Analysis: Pb, Total
QC Batch: 72032
Prep Batch: 61722

### Parameter | Flag | Result | Units | Dilution | RL
---|---|---|---|---|---
Total Lead | | 0.0960 | mg/L | 1 | 0.00500

Sample: 238343 - SW Pond A

Laboratory: Lubbock
Analysis: Se, Total
QC Batch: 72032
Prep Batch: 61722

### Parameter | Flag | Result | Units | Dilution | RL
---|---|---|---|---|---
Total Selenium | | 0.0310 | mg/L | 1 | 0.0200
Sample: 238343 - SW Pond A

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Flag</th>
<th>Result</th>
<th>Units</th>
<th>Dilution</th>
<th>RL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Zinc</td>
<td></td>
<td>0.235</td>
<td>mg/L</td>
<td>1</td>
<td>0.00500</td>
</tr>
</tbody>
</table>

**Method Blank (1)**  
QC Batch: 72032

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Flag</th>
<th>Result</th>
<th>Units</th>
<th>RL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Silver</td>
<td></td>
<td>&lt;0.000469</td>
<td>mg/L</td>
<td>0.005</td>
</tr>
</tbody>
</table>

**Method Blank (1)**  
QC Batch: 72032

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Flag</th>
<th>Result</th>
<th>Units</th>
<th>RL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Arsenic</td>
<td></td>
<td>&lt;0.00465</td>
<td>mg/L</td>
<td>0.01</td>
</tr>
</tbody>
</table>

**Method Blank (1)**  
QC Batch: 72032

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Flag</th>
<th>Result</th>
<th>Units</th>
<th>RL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Barium</td>
<td></td>
<td>&lt;0.00418</td>
<td>mg/L</td>
<td>0.01</td>
</tr>
</tbody>
</table>
### Method Blank (1)  QC Batch: 72032

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Flag</th>
<th>MDL Result</th>
<th>Units</th>
<th>RL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cadmium</td>
<td></td>
<td>&lt;0.00232</td>
<td>mg/L</td>
<td>0.005</td>
</tr>
</tbody>
</table>

### Method Blank (1)  QC Batch: 72032

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Flag</th>
<th>MDL Result</th>
<th>Units</th>
<th>RL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Chromium</td>
<td></td>
<td>&lt;0.00291</td>
<td>mg/L</td>
<td>0.01</td>
</tr>
</tbody>
</table>

### Method Blank (1)  QC Batch: 72032

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Flag</th>
<th>MDL Result</th>
<th>Units</th>
<th>RL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Copper</td>
<td></td>
<td>&lt;0.00313</td>
<td>mg/L</td>
<td>0.005</td>
</tr>
</tbody>
</table>

### Method Blank (1)  QC Batch: 72032

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Flag</th>
<th>MDL Result</th>
<th>Units</th>
<th>RL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Manganese</td>
<td></td>
<td>&lt;0.00423</td>
<td>mg/L</td>
<td>0.005</td>
</tr>
</tbody>
</table>
Method Blank (1)  
QC Batch: 72032

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Flag</th>
<th>MDL</th>
<th>Units</th>
<th>RL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Nickel</td>
<td></td>
<td>&lt;0.00593</td>
<td>mg/L</td>
<td>0.01</td>
</tr>
</tbody>
</table>

Method Blank (1)  
QC Batch: 72032

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Flag</th>
<th>MDL</th>
<th>Units</th>
<th>RL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Lead</td>
<td></td>
<td>&lt;0.00303</td>
<td>mg/L</td>
<td>0.005</td>
</tr>
</tbody>
</table>

Method Blank (1)  
QC Batch: 72032

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Flag</th>
<th>MDL</th>
<th>Units</th>
<th>RL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Selenium</td>
<td></td>
<td>&lt;0.00570</td>
<td>mg/L</td>
<td>0.02</td>
</tr>
</tbody>
</table>

Method Blank (1)  
QC Batch: 72032

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Flag</th>
<th>MDL</th>
<th>Units</th>
<th>RL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Zinc</td>
<td></td>
<td>&lt;0.00178</td>
<td>mg/L</td>
<td>0.005</td>
</tr>
</tbody>
</table>
Method Blank (1)  QC Batch: 72047

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Flag</th>
<th>MDL</th>
<th>Units</th>
<th>RL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Mercury</td>
<td></td>
<td>&lt;0.0000388</td>
<td>mg/L</td>
<td>0.0002</td>
</tr>
</tbody>
</table>

Laboratory Control Spike (LCS-1)

| QC Batch: 72032 | Date Analyzed: 2010-07-26 | Analysis By: RR |
| Prep Batch: 61722 | QC Preparation: 2010-07-26 | Prepared By: KV |

<table>
<thead>
<tr>
<th>Param</th>
<th>LCS Result</th>
<th>Spike Amount</th>
<th>LCS Dilution</th>
<th>Spike matrix</th>
<th>LCS Rec.</th>
<th>LCS Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Silver</td>
<td>0.129 mg/L</td>
<td>0.125</td>
<td>1</td>
<td>&lt;0.000469</td>
<td>103</td>
<td>85 - 115</td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

<table>
<thead>
<tr>
<th>Param</th>
<th>LCS Result</th>
<th>Spike Amount</th>
<th>LCS Dilution</th>
<th>Spike matrix</th>
<th>LCS Rec.</th>
<th>LCS Limit</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Silver</td>
<td>0.126 mg/L</td>
<td>0.125</td>
<td>1</td>
<td>&lt;0.000469</td>
<td>101</td>
<td>85 - 115</td>
<td>2</td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

| QC Batch: 72032 | Date Analyzed: 2010-07-26 | Analysis By: RR |
| Prep Batch: 61722 | QC Preparation: 2010-07-26 | Prepared By: KV |

<table>
<thead>
<tr>
<th>Param</th>
<th>LCS Result</th>
<th>Spike Amount</th>
<th>LCS Dilution</th>
<th>Spike matrix</th>
<th>LCS Rec.</th>
<th>LCS Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Arsenic</td>
<td>0.527 mg/L</td>
<td>0.500</td>
<td>1</td>
<td>&lt;0.000465</td>
<td>105</td>
<td>85 - 115</td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

<table>
<thead>
<tr>
<th>Param</th>
<th>LCS Result</th>
<th>Spike Amount</th>
<th>LCS Dilution</th>
<th>Spike matrix</th>
<th>LCS Rec.</th>
<th>LCS Limit</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Arsenic</td>
<td>0.525 mg/L</td>
<td>0.500</td>
<td>1</td>
<td>&lt;0.000465</td>
<td>105</td>
<td>85 - 115</td>
<td>0</td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

| QC Batch: 72032 | Date Analyzed: 2010-07-26 | Analysis By: RR |
| Prep Batch: 61722 | QC Preparation: 2010-07-26 | Prepared By: KV |
Laboratory Control Spike (LCS-1)

QC Batch: 72032  Date Analyzed: 2010-07-26  Analyzed By: RR
Prep Batch: 61722  QC Preparation: 2010-07-26  Prepared By: KV

<table>
<thead>
<tr>
<th>Param</th>
<th>LCS Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec. Limit</th>
<th>RPD</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Barium</td>
<td>1.08</td>
<td>mg/L</td>
<td>1</td>
<td>1.00</td>
<td>&lt;0.00418</td>
<td>108</td>
<td>85 - 115</td>
<td></td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 72032  Date Analyzed: 2010-07-26  Analyzed By: RR
Prep Batch: 61722  QC Preparation: 2010-07-26  Prepared By: KV

<table>
<thead>
<tr>
<th>Param</th>
<th>LCS Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec. Limit</th>
<th>RPD</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cadmium</td>
<td>0.273</td>
<td>mg/L</td>
<td>1</td>
<td>0.250</td>
<td>&lt;0.00232</td>
<td>109</td>
<td>85 - 115</td>
<td></td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Laboratory Control Spike (LCS-1)

QC Batch: 72032  Date Analyzed: 2010-07-26  Analyzed By: RR
Prep Batch: 61722  QC Preparation: 2010-07-26  Prepared By: KV

<table>
<thead>
<tr>
<th>Param</th>
<th>LCS Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec. Limit</th>
<th>RPD</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Chromium</td>
<td>0.101</td>
<td>mg/L</td>
<td>1</td>
<td>0.100</td>
<td>&lt;0.00291</td>
<td>101</td>
<td>85 - 115</td>
<td></td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.
### Laboratory Control Spike (LCS-1)

**Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.**

<table>
<thead>
<tr>
<th>Param</th>
<th>LCS Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec. Limit</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Copper</td>
<td>0.134 mg/L</td>
<td>1</td>
<td>0.125</td>
<td>&lt;0.00313</td>
<td>107</td>
<td>85 - 115</td>
<td>3</td>
</tr>
</tbody>
</table>

| QC Batch         | 72032      | Date Analyzed: | 2010-07-26 | Analyzed By: | RR           |
| Prep Batch       | 61722      | QC Preparation: | 2010-07-26 | Prepared By:  | KV           |

<table>
<thead>
<tr>
<th>Param</th>
<th>LCS Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec. Limit</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Copper</td>
<td>0.130 mg/L</td>
<td>1</td>
<td>0.125</td>
<td>&lt;0.00313</td>
<td>104</td>
<td>85 - 115</td>
<td>3</td>
</tr>
</tbody>
</table>

### Laboratory Control Spike (LCS-1)

**Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.**

<table>
<thead>
<tr>
<th>Param</th>
<th>LCS Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec. Limit</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Manganese</td>
<td>0.267 mg/L</td>
<td>1</td>
<td>0.250</td>
<td>&lt;0.00423</td>
<td>107</td>
<td>85 - 115</td>
<td>2</td>
</tr>
</tbody>
</table>

| QC Batch         | 72032      | Date Analyzed: | 2010-07-26 | Analyzed By: | RR           |
| Prep Batch       | 61722      | QC Preparation: | 2010-07-26 | Prepared By:  | KV           |

<table>
<thead>
<tr>
<th>Param</th>
<th>LCS Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec. Limit</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Manganese</td>
<td>0.261 mg/L</td>
<td>1</td>
<td>0.250</td>
<td>&lt;0.00423</td>
<td>104</td>
<td>85 - 115</td>
<td>2</td>
</tr>
</tbody>
</table>

### Laboratory Control Spike (LCS-1)

**Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.**

<table>
<thead>
<tr>
<th>Param</th>
<th>LCS Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec. Limit</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Nickel</td>
<td>0.273 mg/L</td>
<td>1</td>
<td>0.250</td>
<td>&lt;0.00530</td>
<td>109</td>
<td>85 - 115</td>
<td>5</td>
</tr>
</tbody>
</table>

| QC Batch         | 72032      | Date Analyzed: | 2010-07-26 | Analyzed By: | RR           |
| Prep Batch       | 61722      | QC Preparation: | 2010-07-26 | Prepared By:  | KV           |

<table>
<thead>
<tr>
<th>Param</th>
<th>LCS Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec. Limit</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Nickel</td>
<td>0.267 mg/L</td>
<td>1</td>
<td>0.250</td>
<td>&lt;0.00593</td>
<td>107</td>
<td>85 - 115</td>
<td>2</td>
</tr>
</tbody>
</table>

**Laboratory Control Spike (LCS-1)**

QC Batch: 72032  
Prep Batch: 61722
Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

<table>
<thead>
<tr>
<th>Param</th>
<th>LCS Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec. Limit</th>
<th>RPD</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Lead</td>
<td>0.337</td>
<td>mg/L</td>
<td>1</td>
<td>0.500</td>
<td>&lt;0.00303</td>
<td>107</td>
<td>85</td>
<td>115</td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 72032  
Prep Batch: 61722  
Date Analyzed: 2010-07-26  
QA: RR  
Prep: KV

<table>
<thead>
<tr>
<th>Param</th>
<th>LCS Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec. Limit</th>
<th>RPD</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Selenium</td>
<td>0.485</td>
<td>mg/L</td>
<td>1</td>
<td>0.500</td>
<td>&lt;0.00570</td>
<td>97</td>
<td>85</td>
<td>115</td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Laboratory Control Spike (LCS-1)**

QC Batch: 72047  
Prep Batch: 61732  
Date Analyzed: 2010-07-26  
QA: TP  
Prep: TP
Matrix Spike (MS-1)  Spiked Sample: 238343

QC Batch: 72032  Date Analyzed: 2010-07-26  Analyzed By: RR
Prep Batch: 61722  QC Preparation: 2010-07-26  Prepared By: KV

<table>
<thead>
<tr>
<th>Param</th>
<th>LCSD Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec. Limit</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Silver</td>
<td>0.130</td>
<td>mg/L</td>
<td>1</td>
<td>0.125</td>
<td>&lt;0.000469</td>
<td>104</td>
<td>75 - 125</td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1)  Spiked Sample: 238343

QC Batch: 72032  Date Analyzed: 2010-07-26  Analyzed By: RR
Prep Batch: 61722  QC Preparation: 2010-07-26  Prepared By: KV

<table>
<thead>
<tr>
<th>Param</th>
<th>MSD Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec. Limit</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Silver</td>
<td>0.129</td>
<td>mg/L</td>
<td>1</td>
<td>0.125</td>
<td>&lt;0.000469</td>
<td>103</td>
<td>75 - 125</td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1)  Spiked Sample: 238343

QC Batch: 72032  Date Analyzed: 2010-07-26  Analyzed By: RR
Prep Batch: 61722  QC Preparation: 2010-07-26  Prepared By: KV

<table>
<thead>
<tr>
<th>Param</th>
<th>MSD Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec. Limit</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Arsenic</td>
<td>0.616</td>
<td>mg/L</td>
<td>1</td>
<td>0.500</td>
<td>0.07</td>
<td>109</td>
<td>75 - 125</td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1)  Spiked Sample: 238343

QC Batch: 72032  Date Analyzed: 2010-07-26  Analyzed By: RR
Prep Batch: 61722  QC Preparation: 2010-07-26  Prepared By: KV

<table>
<thead>
<tr>
<th>Param</th>
<th>MSD Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec. Limit</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Arsenic</td>
<td>0.618</td>
<td>mg/L</td>
<td>1</td>
<td>0.500</td>
<td>0.07</td>
<td>110</td>
<td>75 - 125</td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.
<table>
<thead>
<tr>
<th>Param</th>
<th>MS Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec.</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Barium</td>
<td>1.13</td>
<td>mg/L</td>
<td>1</td>
<td>1.00</td>
<td>0.05</td>
<td>108</td>
<td>75 - 125</td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

<table>
<thead>
<tr>
<th>Param</th>
<th>MSD Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec.</th>
<th>Limit</th>
<th>RPD</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Barium</td>
<td>1.13</td>
<td>mg/L</td>
<td>1</td>
<td>1.00</td>
<td>0.05</td>
<td>108</td>
<td>75 - 125</td>
<td>20</td>
<td>0</td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1) Spiked Sample: 238343**

QC Batch: 72032  Date Analyzed: 2010-07-26  Analyzed By: RR
Prep Batch: 61722  QC Preparation: 2010-07-26  Prepared By: KV

<table>
<thead>
<tr>
<th>Param</th>
<th>MS Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec.</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cadmium</td>
<td>0.312</td>
<td>mg/L</td>
<td>1</td>
<td>0.250</td>
<td>0.03</td>
<td>113</td>
<td>75 - 125</td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

<table>
<thead>
<tr>
<th>Param</th>
<th>MSD Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec.</th>
<th>Limit</th>
<th>RPD</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cadmium</td>
<td>0.312</td>
<td>mg/L</td>
<td>1</td>
<td>0.250</td>
<td>0.03</td>
<td>113</td>
<td>75 - 125</td>
<td>20</td>
<td>0</td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1) Spiked Sample: 238343**

QC Batch: 72032  Date Analyzed: 2010-07-26  Analyzed By: RR
Prep Batch: 61722  QC Preparation: 2010-07-26  Prepared By: KV

<table>
<thead>
<tr>
<th>Param</th>
<th>MS Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec.</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Chromium</td>
<td>0.102</td>
<td>mg/L</td>
<td>1</td>
<td>0.100</td>
<td>&lt;0.00291</td>
<td>102</td>
<td>75 - 125</td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

<table>
<thead>
<tr>
<th>Param</th>
<th>MSD Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec.</th>
<th>Limit</th>
<th>RPD</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Chromium</td>
<td>0.102</td>
<td>mg/L</td>
<td>1</td>
<td>0.100</td>
<td>&lt;0.00291</td>
<td>102</td>
<td>75 - 125</td>
<td>20</td>
<td>0</td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Matrix Spike (MS-1) Spiked Sample: 238343**

QC Batch: 72032  Date Analyzed: 2010-07-26  Analyzed By: RR
Prep Batch: 61722  QC Preparation: 2010-07-26  Prepared By: KV

<table>
<thead>
<tr>
<th>Param</th>
<th>MS Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec.</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Chromium</td>
<td>0.040</td>
<td>mg/L</td>
<td>1</td>
<td>0.040</td>
<td>&lt;0.00291</td>
<td>102</td>
<td>75 - 125</td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.
### Total Copper

<table>
<thead>
<tr>
<th>Param</th>
<th>MS Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec.</th>
<th>RPD</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Copper</td>
<td>0.494 mg/L</td>
<td>1</td>
<td></td>
<td>0.125</td>
<td>0.354</td>
<td>112</td>
<td>75 - 125</td>
<td></td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

### Total Manganese

<table>
<thead>
<tr>
<th>Param</th>
<th>MSD Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec.</th>
<th>RPD</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Manganese</td>
<td>0.368 mg/L</td>
<td>1</td>
<td></td>
<td>0.250</td>
<td>0.094</td>
<td>110</td>
<td>75 - 125</td>
<td></td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

### Total Nickel

<table>
<thead>
<tr>
<th>Param</th>
<th>MSD Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec.</th>
<th>RPD</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Nickel</td>
<td>0.278 mg/L</td>
<td>1</td>
<td></td>
<td>0.250</td>
<td>&lt;0.00593</td>
<td>111</td>
<td>75 - 125</td>
<td></td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.
Matrix Spike (MS-1)  Spiked Sample: 238343

QC Batch: 72032  Date Analyzed: 2010-07-26  Analyzed By: RR
Prep Batch: 61722  QC Preparation: 2010-07-26  Prepared By: KV

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

Matrix Spike (MS-1)  Spiked Sample: 238343

QC Batch: 72047  Date Analyzed: 2010-07-26  Analyzed By: TP
Prep Batch: 61732  QC Preparation: 2010-07-26  Prepared By: TP

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.
<table>
<thead>
<tr>
<th>Param</th>
<th>MS Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec. Limit</th>
<th>Rec. RPD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Mercury</td>
<td>0.00430</td>
<td>mg/L</td>
<td>1</td>
<td>0.00400</td>
<td>0.0031</td>
<td>100</td>
<td>75 - 125</td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

<table>
<thead>
<tr>
<th>Param</th>
<th>MSD Result</th>
<th>Units</th>
<th>Dil.</th>
<th>Spike Amount</th>
<th>Matrix Result</th>
<th>Rec. Limit</th>
<th>RPD Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Mercury</td>
<td>0.00421</td>
<td>mg/L</td>
<td>1</td>
<td>0.00400</td>
<td>0.0031</td>
<td>98</td>
<td>75 - 125</td>
</tr>
</tbody>
</table>

Percent recovery is based on the spike result. RPD is based on the spike and spike duplicate result.

**Standard (ICV-1)**

**QC Batch: 72032**

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>Conc.</th>
<th>Conc.</th>
<th>Percent Recovery</th>
<th>Date Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Silver</td>
<td></td>
<td>mg/L</td>
<td>0.125</td>
<td>0.124</td>
<td>99</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>

**Standard (ICV-1)**

**QC Batch: 72032**

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>Conc.</th>
<th>Conc.</th>
<th>Percent Recovery</th>
<th>Date Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Arsenic</td>
<td></td>
<td>mg/L</td>
<td>1.00</td>
<td>1.01</td>
<td>101</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>

**Standard (ICV-1)**

**QC Batch: 72032**

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>Conc.</th>
<th>Conc.</th>
<th>Percent Recovery</th>
<th>Date Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Barium</td>
<td></td>
<td>mg/L</td>
<td>1.00</td>
<td>1.01</td>
<td>101</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>

**Standard (ICV-1)**

**QC Batch: 72032**

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>Conc.</th>
<th>Conc.</th>
<th>Percent Recovery</th>
<th>Date Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cadmium</td>
<td></td>
<td>mg/L</td>
<td>1.00</td>
<td>1.01</td>
<td>101</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>
### Standard (ICV-1)

**QC Batch:** 72032  
**Date Analyzed:** 2010-07-26  
**Analyzed By:** RR

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>ICVs True Conc.</th>
<th>ICVs Found Conc.</th>
<th>ICVs Percent Recovery</th>
<th>Percent Limits</th>
<th>Date Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Chromium</td>
<td></td>
<td>mg/L</td>
<td>1.00</td>
<td>1.00</td>
<td>100</td>
<td>90 - 110</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>

### Standard (ICV-1)

**QC Batch:** 72032  
**Date Analyzed:** 2010-07-26  
**Analyzed By:** RR

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>ICVs True Conc.</th>
<th>ICVs Found Conc.</th>
<th>ICVs Percent Recovery</th>
<th>Percent Limits</th>
<th>Date Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Copper</td>
<td></td>
<td>mg/L</td>
<td>1.00</td>
<td>0.991</td>
<td>99</td>
<td>90 - 110</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>

### Standard (ICV-1)

**QC Batch:** 72032  
**Date Analyzed:** 2010-07-26  
**Analyzed By:** RR

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>ICVs True Conc.</th>
<th>ICVs Found Conc.</th>
<th>ICVs Percent Recovery</th>
<th>Percent Limits</th>
<th>Date Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Manganese</td>
<td></td>
<td>mg/L</td>
<td>1.00</td>
<td>1.01</td>
<td>101</td>
<td>90 - 110</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>

### Standard (ICV-1)

**QC Batch:** 72032  
**Date Analyzed:** 2010-07-26  
**Analyzed By:** RR

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>ICVs True Conc.</th>
<th>ICVs Found Conc.</th>
<th>ICVs Percent Recovery</th>
<th>Percent Limits</th>
<th>Date Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Nickel</td>
<td></td>
<td>mg/L</td>
<td>1.00</td>
<td>1.00</td>
<td>100</td>
<td>90 - 110</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>

### Standard (ICV-1)

**QC Batch:** 72032  
**Date Analyzed:** 2010-07-26  
**Analyzed By:** RR

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>ICVs True Conc.</th>
<th>ICVs Found Conc.</th>
<th>ICVs Percent Recovery</th>
<th>Percent Limits</th>
<th>Date Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Lead</td>
<td></td>
<td>mg/L</td>
<td>1.00</td>
<td>1.01</td>
<td>101</td>
<td>90 - 110</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>
## Standard (ICV-1)

**QC Batch:** 72032  
**Date Analyzed:** 2010-07-26  
**Analyzed By:** RR

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>ICVs True Conc.</th>
<th>ICVs Found Conc.</th>
<th>ICVs Percent Recovery</th>
<th>Percent</th>
<th>Date Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Selenium</td>
<td></td>
<td>mg/L</td>
<td>1.00</td>
<td>1.02</td>
<td>102</td>
<td>90 - 110</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>

## Standard (ICV-1)

**QC Batch:** 72032  
**Date Analyzed:** 2010-07-26  
**Analyzed By:** RR

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>ICVs True Conc.</th>
<th>ICVs Found Conc.</th>
<th>ICVs Percent Recovery</th>
<th>Percent</th>
<th>Date Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Zinc</td>
<td></td>
<td>mg/L</td>
<td>1.00</td>
<td>1.01</td>
<td>101</td>
<td>90 - 110</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>

## Standard (CCV-1)

**QC Batch:** 72032  
**Date Analyzed:** 2010-07-26  
**Analyzed By:** RR

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>CCVs True Conc.</th>
<th>CCVs Found Conc.</th>
<th>CCVs Percent Recovery</th>
<th>Percent</th>
<th>Date Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Silver</td>
<td></td>
<td>mg/L</td>
<td>0.125</td>
<td>0.127</td>
<td>102</td>
<td>90 - 110</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>

## Standard (CCV-1)

**QC Batch:** 72032  
**Date Analyzed:** 2010-07-26  
**Analyzed By:** RR

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>CCVs True Conc.</th>
<th>CCVs Found Conc.</th>
<th>CCVs Percent Recovery</th>
<th>Percent</th>
<th>Date Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Arsenic</td>
<td></td>
<td>mg/L</td>
<td>1.00</td>
<td>1.02</td>
<td>102</td>
<td>90 - 110</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>

## Standard (CCV-1)

**QC Batch:** 72032  
**Date Analyzed:** 2010-07-26  
**Analyzed By:** RR

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>CCVs True Conc.</th>
<th>CCVs Found Conc.</th>
<th>CCVs Percent Recovery</th>
<th>Percent</th>
<th>Date Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Barium</td>
<td></td>
<td>mg/L</td>
<td>1.00</td>
<td>1.03</td>
<td>103</td>
<td>90 - 110</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>
### Standard (CCV-1)

**QC Batch:** 72032  
**Date Analyzed:** 2010-07-26  
**Analyzed By:** RR

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>CCVs True Conc.</th>
<th>CCVs Found Conc.</th>
<th>CCVs Percent Recovery</th>
<th>Percent Limits</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cadmium</td>
<td></td>
<td>mg/L</td>
<td>1.00</td>
<td>1.02</td>
<td>102</td>
<td>90 - 110</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>

### Standard (CCV-1)

**QC Batch:** 72032  
**Date Analyzed:** 2010-07-26  
**Analyzed By:** RR

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>CCVs True Conc.</th>
<th>CCVs Found Conc.</th>
<th>CCVs Percent Recovery</th>
<th>Percent Limits</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Chromium</td>
<td></td>
<td>mg/L</td>
<td>1.00</td>
<td>1.02</td>
<td>102</td>
<td>90 - 110</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>

### Standard (CCV-1)

**QC Batch:** 72032  
**Date Analyzed:** 2010-07-26  
**Analyzed By:** RR

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>CCVs True Conc.</th>
<th>CCVs Found Conc.</th>
<th>CCVs Percent Recovery</th>
<th>Percent Limits</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Copper</td>
<td></td>
<td>mg/L</td>
<td>1.00</td>
<td>1.00</td>
<td>100</td>
<td>90 - 110</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>

### Standard (CCV-1)

**QC Batch:** 72032  
**Date Analyzed:** 2010-07-26  
**Analyzed By:** RR

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>CCVs True Conc.</th>
<th>CCVs Found Conc.</th>
<th>CCVs Percent Recovery</th>
<th>Percent Limits</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Manganese</td>
<td></td>
<td>mg/L</td>
<td>1.00</td>
<td>1.03</td>
<td>103</td>
<td>90 - 110</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>

### Standard (CCV-1)

**QC Batch:** 72032  
**Date Analyzed:** 2010-07-26  
**Analyzed By:** RR

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>CCVs True Conc.</th>
<th>CCVs Found Conc.</th>
<th>CCVs Percent Recovery</th>
<th>Percent Limits</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Nickel</td>
<td></td>
<td>mg/L</td>
<td>1.00</td>
<td>1.02</td>
<td>102</td>
<td>90 - 110</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>
### Standard (CCV-1)

**QC Batch:** 72032  
**Date Analyzed:** 2010-07-26  
**Analyzed By:** RR

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>CCVs True Conc.</th>
<th>CCVs Found Conc.</th>
<th>CCVs Percent Recovery</th>
<th>Limits</th>
<th>Date Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Lead</td>
<td></td>
<td>mg/L</td>
<td>1.00</td>
<td>1.01</td>
<td>101</td>
<td>90 - 110</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>

### Standard (CCV-1)

**QC Batch:** 72032  
**Date Analyzed:** 2010-07-26  
**Analyzed By:** RR

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>CCVs True Conc.</th>
<th>CCVs Found Conc.</th>
<th>CCVs Percent Recovery</th>
<th>Limits</th>
<th>Date Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Selenium</td>
<td></td>
<td>mg/L</td>
<td>1.00</td>
<td>1.02</td>
<td>102</td>
<td>90 - 110</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>

### Standard (CCV-1)

**QC Batch:** 72032  
**Date Analyzed:** 2010-07-26  
**Analyzed By:** RR

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>CCVs True Conc.</th>
<th>CCVs Found Conc.</th>
<th>CCVs Percent Recovery</th>
<th>Limits</th>
<th>Date Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Zinc</td>
<td></td>
<td>mg/L</td>
<td>1.00</td>
<td>1.02</td>
<td>102</td>
<td>90 - 110</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>

### Standard (CCV-1)

**QC Batch:** 72047  
**Date Analyzed:** 2010-07-26  
**Analyzed By:** TP

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>CCVs True Conc.</th>
<th>CCVs Found Conc.</th>
<th>CCVs Percent Recovery</th>
<th>Limits</th>
<th>Date Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Mercury</td>
<td></td>
<td>mg/L</td>
<td>0.00500</td>
<td>0.00494</td>
<td>99</td>
<td>90 - 110</td>
<td>2010-07-26</td>
</tr>
</tbody>
</table>

### Standard (CCV-2)

**QC Batch:** 72047  
**Date Analyzed:** 2010-07-26  
**Analyzed By:** TP

<table>
<thead>
<tr>
<th>Param</th>
<th>Flag</th>
<th>Units</th>
<th>CCVs True Conc.</th>
<th>CCVs Found Conc.</th>
<th>CCVs Percent Recovery</th>
<th>Limits</th>
<th>Date Analyzed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Mercury</td>
<td></td>
<td>mg/L</td>
<td>0.00500</td>
<td>0.00498</td>
<td>100</td>
<td>90 - 110</td>
<td>2010-07-26</td>
</tr>
<tr>
<td>LAB #</td>
<td>FIELD CODE</td>
<td>CONTAINERS</td>
<td>MATRIX</td>
<td>PRESERVATIVE METHOD</td>
<td>SAMPLING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------</td>
<td>------------</td>
<td>------------</td>
<td>--------</td>
<td>---------------------</td>
<td>----------</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>238343</td>
<td>1</td>
<td>WATER</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SOIL</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>SLUDGE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HTC</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>HNO3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>H2SO4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NAOH</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>ICE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>NONE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Analysis Request**

(Circle or Specify Method No.)

<table>
<thead>
<tr>
<th>Method</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TPH</td>
<td>Total Petroleum Hydrocarbons</td>
</tr>
<tr>
<td>PAH</td>
<td>Polycyclic Aromatic Hydrocarbons</td>
</tr>
<tr>
<td>GC/MS</td>
<td>Gas Chromatography/Mass Spectrometry</td>
</tr>
<tr>
<td>TCLP</td>
<td>Toxicity Characteristic Leaching Procedure</td>
</tr>
</tbody>
</table>

**Sample Details**

- **Company:** ARCT
- **Date:** 7/21/10
- **Time:** 7:28

**Received by:** Trace Analysis

**Remarks:** Rust 24 hr.

**Submittal of samples constitutes agreement to Terms and Conditions listed on reverse side of C. O. C.**
### Table 5-1
**Numeric Effluent Limitations**

<table>
<thead>
<tr>
<th>Hazardous Metal (Total)</th>
<th>Daily Average (mg/l)</th>
<th>Daily Composite (mg/l)</th>
<th>Daily Maximum (mg/l)</th>
<th>Monitoring Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic</td>
<td>0.1</td>
<td>0.2</td>
<td>0.3</td>
<td>1/Year</td>
</tr>
<tr>
<td>Barium</td>
<td>1.0</td>
<td>2.0</td>
<td>4.0</td>
<td>1/Year</td>
</tr>
<tr>
<td>Cadmium</td>
<td>0.05</td>
<td>0.1</td>
<td>0.2</td>
<td>1/Year</td>
</tr>
<tr>
<td>Chromium</td>
<td>0.5</td>
<td>1.0</td>
<td>5.0</td>
<td>1/Year</td>
</tr>
<tr>
<td>Copper</td>
<td>0.5</td>
<td>1.0</td>
<td>2.0</td>
<td>1/Year</td>
</tr>
<tr>
<td>Lead</td>
<td>0.5</td>
<td>1.0</td>
<td>1.5</td>
<td>1/Year</td>
</tr>
<tr>
<td>Manganese</td>
<td>1.0</td>
<td>2.0</td>
<td>3.0</td>
<td>1/Year</td>
</tr>
<tr>
<td>Mercury</td>
<td>0.005</td>
<td>0.005</td>
<td>0.01</td>
<td>1/Year</td>
</tr>
<tr>
<td>Nickel</td>
<td>1.0</td>
<td>2.0</td>
<td>3.0</td>
<td>1/Year</td>
</tr>
<tr>
<td>Selenium</td>
<td>0.05</td>
<td>0.1</td>
<td>0.2</td>
<td>1/Year</td>
</tr>
<tr>
<td>Silver</td>
<td>0.05</td>
<td>0.1</td>
<td>0.2</td>
<td>1/Year</td>
</tr>
<tr>
<td>Zinc</td>
<td>1.0</td>
<td>2.0</td>
<td>6.0</td>
<td>1/Year</td>
</tr>
</tbody>
</table>