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Infrastructure, environment, buildings

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ENVIRONMENT

Commissioner
Indiana Department of Environmental Management
100 North Senate Avenue
Indianapolis, Indiana 46206-2241
Attention: Chief, Permits Branch

Subject:
Groundwater Data Statistical Evaluation – Closed Hazardous Waste Surface Impoundment, GM Former AGT Division – INR000021436, 2701 West Raymond Street, Indianapolis, IN

Date:
August 16, 2010

Contact:
Heather Gastineau-Lyons
Phone:
317-236-5214

Email:
heather.gastineau@arcadis-us.com

Our ref:
IN000297.2010.00100

Dear Commissioner:

On behalf of Motors Liquidation Company (MLC), ARCADIS respectfully submits this Groundwater Monitoring Statistical Evaluation as specified in the Final Hazardous Waste Post-Closure Permit Renewal (Permit) dated January 26, 2007. As required by the Permit, this Evaluation provides details regarding the semi-annual groundwater monitoring performed in June 2010 and is being submitted with sixty (60) days of the final laboratory report which was received by ARCADIS on June 17, 2010. Signed Certifications by MLC, Favero Geosciences and ARCADIS are attached as per the Permit. The following sections provide details of the groundwater monitoring.

Groundwater Monitoring

On June 4, 2010 and in accordance with the Permit, one groundwater sample was collected from each of the downgradient monitoring wells (MW-201B, MW-202B and MW-203B) and the upgradient monitoring well MW-206B. The locations of the monitoring wells are presented on Figure 1. Depth to groundwater was measured prior to purging the monitoring wells for sample collection. Groundwater samples were collected utilizing a low-flow/low-stress sampling technique. A stainless steel bladder pump equipped with disposable polyethylene bladder and tubing was used to purge the monitoring wells prior to sampling. Field parameter (pH, temperature, turbidity, conductivity, oxidation-reduction potential and dissolved oxygen) were measured during the purging of the monitoring wells. Groundwater was purged until the field parameters reached stabilized measurements as specified in the Permit. Approximately 12 gallons of water were purged from the four monitoring wells during

the sampling event. After field measurements stabilized, groundwater samples were collected in laboratory-supplied containers. The containers were immediately sealed, labeled and placed in an ice-packed cooler that was transported to Pace Analytical Services, Inc. (Pace), located in Indianapolis, Indiana, observing proper chain-of-custody procedures. The groundwater samples were analyzed for dissolved arsenic, barium, cadmium, chromium, lead, mercury, silver, selenium and total cyanide.

Groundwater analytical results for the monitoring wells are presented in Table 1. Groundwater field data sheets from the sampling event are provided in Attachment A. The laboratory analytical results are provided in Attachment B.

A waste characterization sample was collected from the purge water. After analytical results of the purge water demonstrated that concentrations were below permitted discharge limits, the water was discharged to the sanitary sewer in accordance with Industrial Discharge Permit #342403 granted by the City of Indianapolis.

Groundwater Evaluation

In accordance with the Permit (and subsequent Permit Modifications), analytical data from monitoring well MW-206B (designated as background upgradient monitoring well) was evaluated to establish background groundwater quality conditions. Details of the exploratory data analysis and statistical evaluation of background data, conducted in accordance with Appendix H, Section 4.3 of the Permit, is included as Attachment C. Background groundwater quality was established using the most recent 16 valid observations (i.e., May 2003 to June 2010) for each indicator parameter, as summarized in Table 2.

A point-by-point comparison of data from compliance wells to background screening levels (BSLs) was conducted to evaluate water quality. BSLs were calculated using concentrations of indicator parameters in upgradient monitoring well MW-206B. The desired statistic to represent the BSL is a one-sided 95 percent confidence interval for the 99th percentile (95/99 upper tolerance limit [UTL]). However, the high frequency of non-detects precluded calculation of the 95/99 UTL for all but barium, which had six detects. For the other parameters, the BSL was based conservatively on the maximum detected concentration or the maximum reporting limit. The final BSL values are presented in Table 3.

The groundwater analytical results from monitoring wells MW-201B, MW-202B and, MW-203B (designated as downgradient monitoring wells) were all non-detects,

therefore, below the Permit specific quantitation limits for all indicator parameters. The results of the statistical evaluation, summarized in Attachment C, suggest that there is no evidence of impacts to groundwater quality.

In addition to this report, an electronic digital dataset report in the format specified in Appendix H, Tables 3 and 4 of the Permit will be submitted electronically to the email address specified in the Permit.

Finally, a review of groundwater elevations from monitoring wells installed within the surface impoundment (internal) and monitoring wells installed outside the slurry wall and in the lower aquifer (external) was completed to ensure an inward hydraulic gradient. Based on the review, the external monitoring wells were generally two feet higher in elevation than the internal monitoring wells, thereby demonstrating an inward hydraulic gradient. A graphical depiction of the elevations is presented on Figure 2.

MLC plans to collect groundwater samples the monitoring wells in the Fall of 2010. If you have any questions or comments regarding the enclosed Groundwater Data Statistical Evaluation, please contact Mr. David Favero at 217-522-6714 or either of the undersigned.

Sincerely,

ARCADIS U.S., Inc.

Anthony D. Cline FOR
Heather Gastineau-Lyons, L.P.G.
Staff Geologist

Sarah Fisher
Sarah Fisher, C.H.M.M
Senior Scientist

Copies:
David Favero, on behalf of MLC

Attachments:
Figure 1 – Site Map
Figure 2 – Surface Impoundment June 3, 2010 Groundwater Elevations
Table 1 – Groundwater Analytical Data
Table 2 – Upgradient Monitoring Well MW-206B Background Data
Attachment 1 – Groundwater Sampling Field Sheets
Attachment 2 – Laboratory Analytical Report
Attachment 3 – Statistical Evaluation of Background Groundwater Quality

Certification

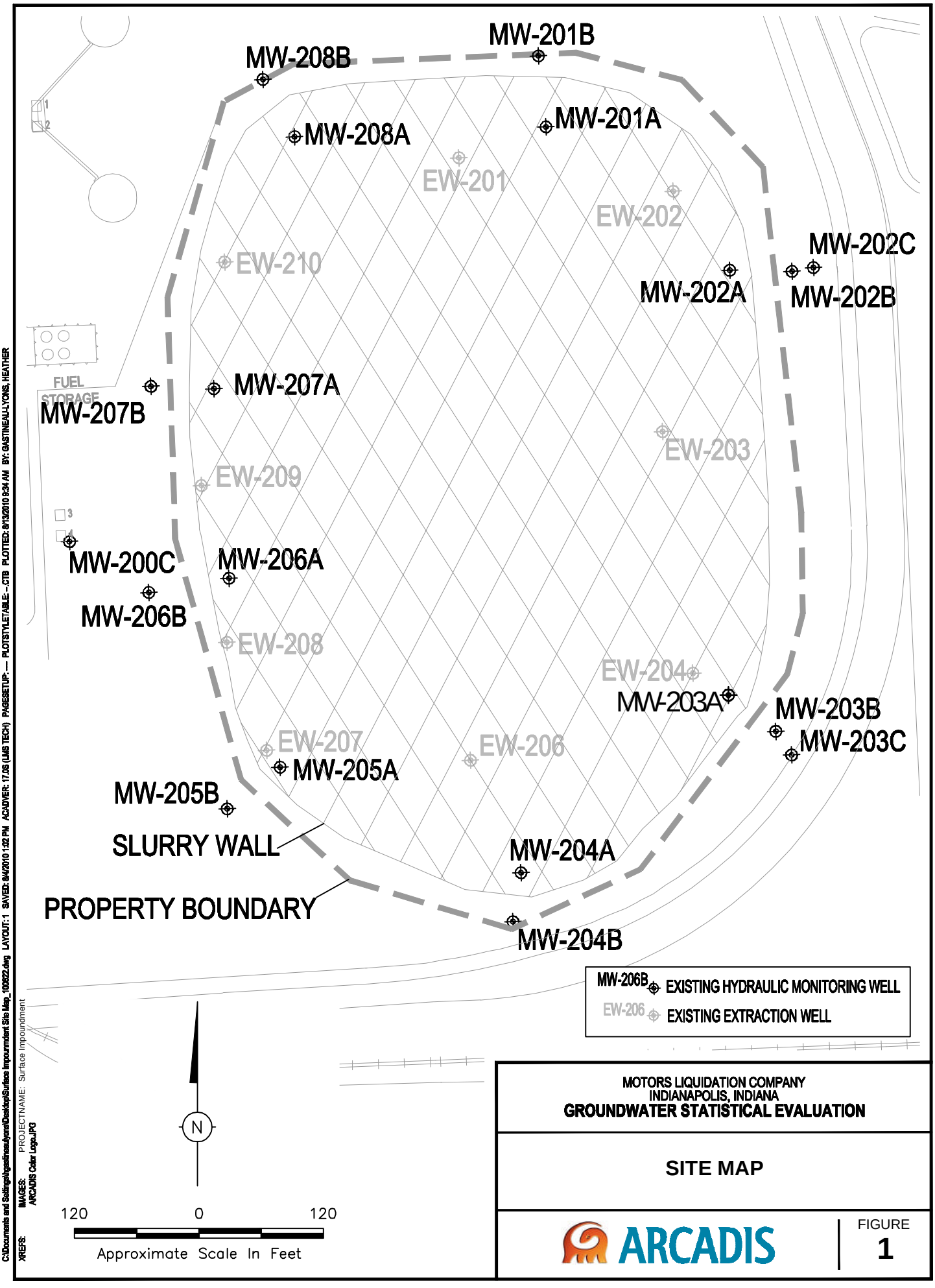
Certification: I certify, under penalty of law, that this document and attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

INR000021436
U.S EPA I.D. Number

GM Former AGT Division
Site Name

David Favero, P.G.
Favero Geosciences
Motors Liquidation Company Project Manager
as Agent for MLC

8/12/10
Date



C:\Documents and Settings\hgaskineaulyons\Desktop\Surface Impoundment Site Map_100822.dwg LAYOUT: 1 SAVED: 8/4/2010 1:32 PM ACADVER: 17.0S (LMS TECH) PAGESETUP: — PLOTSTYLETABLE: --.CTB PLOTTED: 8/13/2010 8:34 AM BY: GASTINEAU-LYONS, HEATHER

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ARCADIS Color Logo.JPG

MOTORS LIQUIDATION COMPANY
INDIANAPOLIS, INDIANA
GROUNDWATER STATISTICAL EVALUATION

SITE MAP

ARCADIS

FIGURE
1

Figure 2. Surface Impoundment
June 3, 2010 Groundwater Elevations

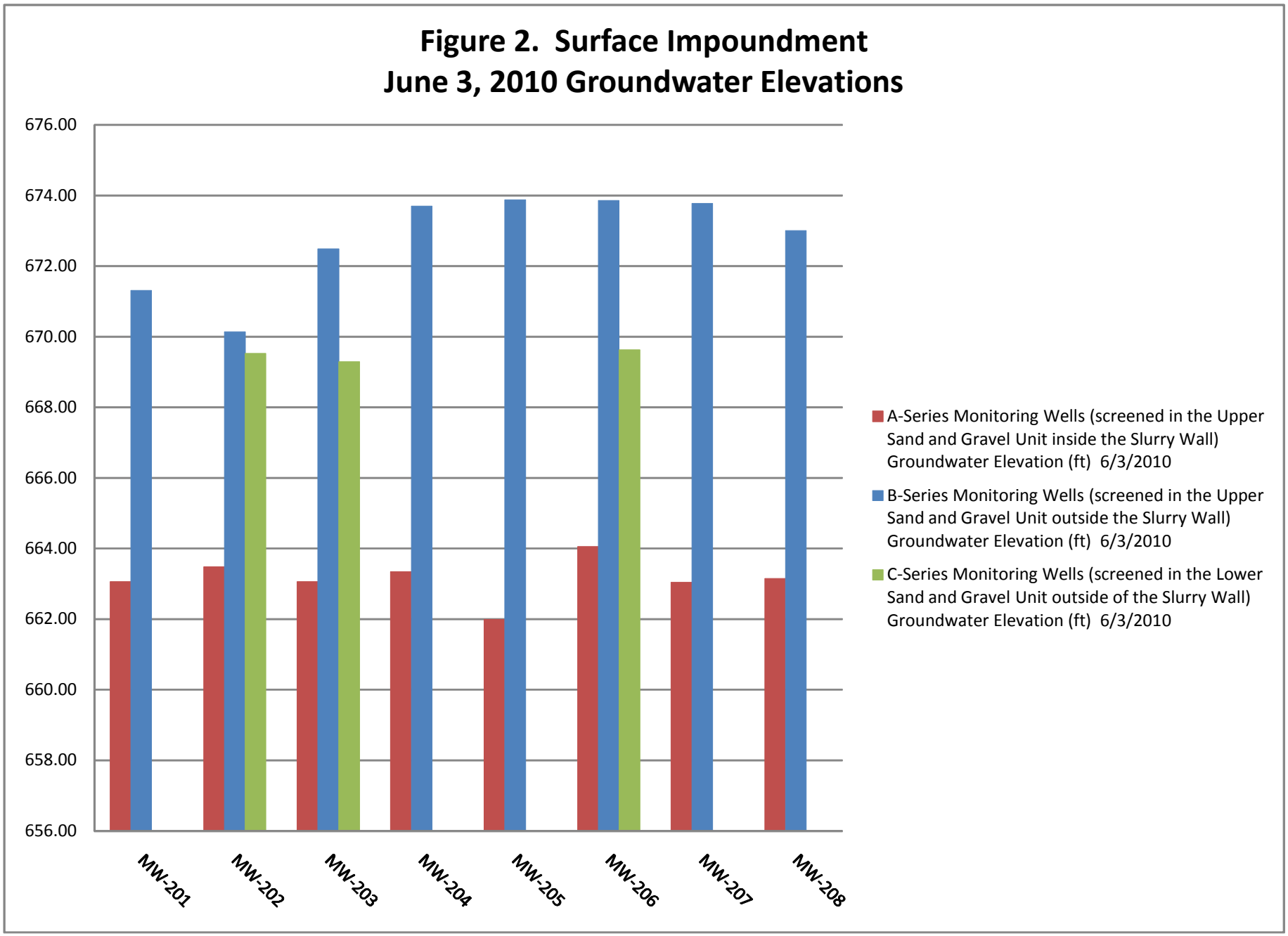

Table 1. Groundwater Analytical Data. Closed Hazardous Waste Surface Impoundment, Former Allison Gas Turbine Division -Plant 5, Indianapolis, Indiana, INR000021436.

Monitoring Well		Arsenic	Arsenic (dissolved)	Barium	Barium (dissolved)	Cadmium	Cadmium (dissolved)	Chromium	Chromium Total (dissolved)	Cyanide (total)	Lead	Lead (dissolved)	Mercury	Mercury (dissolved)	Selenium	Selenium (dissolved)	Silver	Silver (dissolved)
Sample Date	**Sample ID**																	
MW-201B																		
5/29/2002	MW-201B (052902)		< 0.05 U		< 0.1 U		< 0.01 U		< 0.05 U	< 0.02 U		< 0.05 U		< 0.002 U		< 0.01 U		< 0.05 U
11/20/2002	MW-201B (112002)		< 0.05 U		< 0.1 U		< 0.005 U		< 0.05 U	< 0.02 U		< 0.05 U		< 0.002 U		< 0.01 U		< 0.05 U
5/21/2003	MW-201BA(052103)		< 0.0500 U		< 0.100 U		< 0.00500 U		< 0.0500 U	< 0.0200 U		< 0.0500 U		< 0.00200 U		< 0.0100 U		< 0.0500 U
5/21/2003	MW-201BB(052103)		< 0.0500 U		< 0.100 U		< 0.00500 U		< 0.0500 U	0.0253		< 0.0500 U		< 0.00200 U		0.0102		< 0.0500 U
5/21/2003	MW-201BC(052103)		< 0.0500 U		< 0.100 U		< 0.00500 U		< 0.0500 U	< 0.0200 U		< 0.0500 U		< 0.00200 U		< 0.0100 U		< 0.0500 U
5/21/2003	MW-201B(052103)		< 0.0500 U		< 0.100 U		< 0.00500 U		< 0.0500 U	< 0.0200 U		< 0.0500 U		< 0.00200 U		< 0.0100 U		< 0.0500 U
11/19/2003	MW-201BA(111903)		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/19/2003	MW-201BB(111903)		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/19/2003	MW-201BC(111903)		0.0110		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/19/2003	MW-201B(111903)		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/25/2004	MW-201B (A)-052504		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/25/2004	MW-201B (B)-052504		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/25/2004	MW-201B (C)-052504		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/25/2004	MW-201B (D)-052504		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/11/2004	MW-201B (A)-111104		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/11/2004	MW-201B (B)-111104		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/11/2004	MW-201B (C)-111104		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/11/2004	MW-201B (D)-111104		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/9/2005	MW-201B (A)		< 0.01 U		< 0.05 U		< 0.001 U		< 0.02 U	< 0.02 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.01 U
5/9/2005	MW-201B (B)		< 0.01 U		< 0.05 U		< 0.001 U		< 0.02 U	< 0.02 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.01 U
5/9/2005	MW-201B (C)		< 0.01 U		< 0.05 U		< 0.001 U		< 0.02 U	< 0.02 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.01 U
5/9/2005	MW-201B (D)		< 0.01 U		< 0.05 U		< 0.001 U		< 0.02 U	< 0.02 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.01 U
11/10/2005	MW-201B(A)~11/10/05		< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U	< 0.0100 U		< 0.00500 U		< 0.000200 U		< 0.0100 U		< 0.0100 U
11/10/2005	MW-201B(B)~11/10/05		< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U	< 0.0100 U		< 0.00500 U		< 0.000200 U		< 0.0100 U		< 0.0100 U
11/10/2005	MW-201B(C)~11/10/05		< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U	< 0.0100 U		< 0.00500 U		< 0.000200 U		< 0.0100 U		< 0.0100 U
11/10/2005	MW-201B(D)~11/10/05		< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U	< 0.0100 U		< 0.00500 U		< 0.000200 U		< 0.0100 U		< 0.0100 U
5/17/2006	MW-201B (A)~05/17/06	< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
5/17/2006	MW-201B (B)~05/17/06	< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
5/17/2006	MW-201B (C)~05/17/06	< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
5/17/2006	MW-201B (D)~05/17/06	< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
11/8/2006	MW-201B (110806)	< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
5/16/2007	MW-201B (051607)		< 0.0100 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0050 U				< 0.0100 U		< 0.0500 U
5/16/2007	MW-201B (051607)-MISS-HG													< 0.0020 UJ				
11/15/2007	MW-201B (111507)		< 0.0100 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0100 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
5/14/2008	MW-201B (051408)		< 0.0100 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0100 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
11/6/2008	MW-201B (110608)		< 0.0100 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.0050 U		< 0.0050 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
5/14/2009	MW-201B (051409)		< 0.0100 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0050 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
11/23/2009	MW-201B (112309)		< 0.005 U		< 0.1 U		< 0.005 U		< 0.01 U	< 0.01 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.05 U
6/4/2010	MW-201B(060410)		< 0.0050 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0050 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
MW-202B																		
5/29/2002	MW-202B (052902)		< 0.05 U		< 0.1 U		< 0.01 U		< 0.05 U	< 0.02 U		< 0.05 U		< 0.002 U		< 0.01 U		< 0.05 U
11/20/2002	MW-202B (112002)		< 0.05 U		< 0.1 U		< 0.005 U		< 0.05 U	< 0.02 U		< 0.05 U		< 0.002 U		< 0.01 U		< 0.05 U
5/21/2003	MW-202BA(052103)		< 0.0500 U		< 0.100 U		< 0.00500 U		< 0.0500 U	< 0.0200 U		< 0.0500 U		< 0.00200 U		< 0.0100 U		< 0.0500 U
5/21/2003	MW-202BB(052103)		< 0.0500 U		< 0.100 U		< 0.00500 U		< 0.0500 U	< 0.0200 U		< 0.0500 U		< 0.00200 U		< 0.0100 U		< 0.0500 U
5/21/2003	MW-202BC(052103)		< 0.0500 U		< 0.100 U		< 0.00500 U		< 0.0500 U	0.0209		< 0.0500 U		< 0.00200 U		< 0.0100 U		< 0.0500 U
5/21/2003	MW-202B(052103)		< 0.0500 U		< 0.100 U		< 0.00500 U		< 0.0500 U	< 0.0200 U		< 0.0500 U		< 0.00200 U		< 0.0100 U		< 0.0500 U
11/19/2003	MW-202BA(111903)		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/19/2003	MW-202BB(111903)		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/19/2003	MW-202BC(111903)		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/19/2003	MW-202B(111903)		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/25/2004	MW-202B (A)-052504		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/25/2004	MW-202B (B)-052504		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/25/2004	MW-202B (C)-052504		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/25/2004	MW-202B (D)-052504		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/11/2004	MW-202B (A)-111104		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/11/2004	MW-202B (B)-111104		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/11/2004	MW-202B (C)-111104		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/11/2004	MW-202B (D)-111104		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/9/2005	MW-202B (A)		< 0.01 U		< 0.05 U		< 0.001 U		< 0.02 U	< 0.02 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.01 U

Table 1. Groundwater Analytical Data. Closed Hazardous Waste Surface Impoundment, Former Allison Gas Turbine Division -Plant 5, Indianapolis, Indiana, INR000021436.

Monitoring Well		Arsenic	Arsenic (dissolved)	Barium	Barium (dissolved)	Cadmium	Cadmium (dissolved)	Chromium	Chromium Total (dissolved)	Cyanide (total)	Lead	Lead (dissolved)	Mercury	Mercury (dissolved)	Selenium	Selenium (dissolved)	Silver	Silver (dissolved)
Sample Date	**Sample ID**																	
5/9/2005	MW-202B (B)		< 0.01 U		< 0.05 U		< 0.001 U		< 0.02 U	< 0.02 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.01 U
5/9/2005	MW-202B (C)		< 0.01 U		< 0.05 U		< 0.001 U		< 0.02 U	< 0.02 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.01 U
5/9/2005	MW-202B (D)		< 0.01 U		< 0.05 U		< 0.001 U		< 0.02 U	< 0.02 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.01 U
11/10/2005	MW-202B(A)~11/10/05		< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U	< 0.0100 U		< 0.00500 U		< 0.000200 U		0.0103		< 0.0100 U
11/10/2005	MW-202B(B)~11/10/05		< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U	< 0.0100 U		< 0.00500 U		< 0.000200 U		< 0.0100 U		< 0.0100 U
11/10/2005	MW-202B(C)~11/10/05		< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U	< 0.0100 U		< 0.00500 U		< 0.000200 U		< 0.0100 U		< 0.0100 U
11/10/2005	MW-202B(D)~11/10/05		< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U	< 0.0100 U		< 0.00500 U		< 0.000200 U		< 0.0100 U		< 0.0100 U
5/17/2006	MW-202B (A)~05/17/06	< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
5/17/2006	MW-202B (B)~05/17/06	< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
5/17/2006	MW-202B (C)~05/17/06	< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
5/17/2006	MW-202B (D)~05/17/06	< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
11/8/2006	MW-202B (110806)	< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
5/16/2007	MW-202B (051607)		< 0.0100 U		< 0.1 U		< 0.0050 U		35.9	< 0.010 U		< 0.0050 U				< 0.0100 U		< 0.0500 U
5/16/2007	MW-202B (051607)-MISS-HG													< 0.0020 UJ				
11/15/2007	MW-202B (111507)		< 0.0100 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0100 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
5/14/2008	MW-202B (051408)		< 0.0100 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0100 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
5/14/2008	FD-1 (051408)		< 0.0100 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0100 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
11/6/2008	MW-202B (110608)		< 0.0100 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.0050 U		< 0.0050 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
5/14/2009	MW-202B (051409)		< 0.0100 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0050 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
11/23/2009	MW-202B (112309)		< 0.005 U		< 0.1 U		< 0.005 U		< 0.01 U	< 0.01 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.05 U
6/4/2010	MW-202B(060410)		< 0.0050 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0050 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
MW-203B																		
5/29/2002	MW-203B (052902)		< 0.05 U		< 0.1 U		< 0.01 U		< 0.05 U	< 0.02 U		< 0.05 U		< 0.002 U		0.0133		< 0.05 U
11/20/2002	MW-203B (112002)		< 0.05 U		< 0.1 U		< 0.005 U		< 0.05 U	< 0.02 U		< 0.05 U		< 0.002 U		< 0.01 U		< 0.05 U
5/21/2003	MW-203BA(052103)		< 0.0500 U		< 0.100 U		< 0.00500 U		< 0.0500 U	< 0.0200 U		< 0.0500 U		< 0.00200 U		0.0104		< 0.0500 U
5/21/2003	MW-203BB(052103)		< 0.0500 U		< 0.100 U		< 0.00500 U		< 0.0500 U	< 0.0200 U		< 0.0500 U		< 0.00200 U		< 0.0100 U		< 0.0500 U
5/21/2003	MW-203BC(052103)		< 0.0500 U		< 0.100 U		< 0.00500 U		< 0.0500 U	< 0.0200 U		< 0.0500 U		< 0.00200 U		< 0.0100 U		< 0.0500 U
5/21/2003	MW-203B(052103)		< 0.0500 U		< 0.100 U		< 0.00500 U		< 0.0500 U	0.0239		< 0.0500 U		< 0.00200 U		< 0.0100 U		< 0.0500 U
11/19/2003	MW-203BA(111903)		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/19/2003	MW-203BB(111903)		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/19/2003	MW-203BC(111903)		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/19/2003	MW-203B(111903)		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/25/2004	MW-203B (A)-052504		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/25/2004	MW-203B (B)-052504		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/25/2004	MW-203B (C)-052504		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/25/2004	MW-203B (D)-052504		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/11/2004	MW-203B (A)-111104		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/11/2004	MW-203B (B)-111104		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/11/2004	MW-203B (C)-111104		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/11/2004	MW-203B (D)-111104		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/9/2005	MW-203B (A)		< 0.01 U		< 0.05 U		< 0.001 U		< 0.02 U	< 0.02 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.01 U
5/9/2005	MW-203B (B)		< 0.01 U		< 0.05 U		< 0.001 U		< 0.02 U	< 0.02 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.01 U
5/9/2005	MW-203B (C)		< 0.01 U		< 0.05 U		0.00132		< 0.02 U	< 0.02 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.01 U
5/9/2005	MW-203B (D)		< 0.01 U		< 0.05 U		< 0.001 U		< 0.02 U	< 0.02 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.01 U
11/10/2005	MW-203B(A)~11/10/05		< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U	< 0.0100 U		< 0.00500 U		< 0.000200 U		< 0.0100 U		< 0.0100 U
11/10/2005	MW-203B(B)~11/10/05		< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U	< 0.0100 U		< 0.00500 U		< 0.000200 U		< 0.0100 U		< 0.0100 U
11/10/2005	MW-203B(C)~11/10/05		< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U	< 0.0100 U		< 0.00500 U		< 0.000200 U		< 0.0100 U		< 0.0100 U
11/10/2005	MW-203B(D)~11/10/05		< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U	< 0.0100 U		< 0.00500 U		< 0.000200 U		< 0.0100 U		< 0.0100 U
5/17/2006	MW-203B (A)~05/17/06	< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
5/17/2006	MW-203B (B)~05/17/06	< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
5/17/2006	MW-203B (C)~05/17/06	< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
5/17/2006	MW-203B (D)~05/17/06	< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
11/8/2006	MW-203B (110806)	< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
5/16/2007	MW-203B (051607)		< 0.0100 U		< 0.1 U		< 0.0050 U		14.7	< 0.010 U		< 0.0050 U				< 0.0100 U		< 0.0500 U
5/16/2007	MW-203B (051607)-MISS-HG													< 0.0020 UJ				
11/15/2007	MW-203B (111507)		< 0.0100 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0100 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
5/14/2008	MW-203B (051408)		< 0.0100 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0100 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
11/6/2008	MW-203B (110608)		< 0.0100 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.0050 U		< 0.0050 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
5/14/2009	MW-203B (051409)		< 0.0100 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0050 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
5/14/2009	FD-1 (051409)		< 0.0100 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0050 U		< 0.0020 U		< 0.0100 U		< 0.0500 U

Table 1. Groundwater Analytical Data. Closed Hazardous Waste Surface Impoundment, Former Allison Gas Turbine Division -Plant 5, Indianapolis, Indiana, INR000021436.

Monitoring Well		Arsenic	Arsenic (dissolved)	Barium	Barium (dissolved)	Cadmium	Cadmium (dissolved)	Chromium	Chromium Total (dissolved)	Cyanide (total)	Lead	Lead (dissolved)	Mercury	Mercury (dissolved)	Selenium	Selenium (dissolved)	Silver	Silver (dissolved)
Sample Date	**Sample ID**																	
11/23/2009	MW-203B (112309)		< 0.005 U		< 0.1 U		< 0.005 U		< 0.01 U	< 0.01 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.05 U
6/4/2010	FD-1(060410)-TP		< 0.0050 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0050 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
6/4/2010	MW-203B(060410)		< 0.0050 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0050 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
MW-206B																		
8/17/2001	MW-206B(8-17-01A)		< 0.0100 U*		< 0.100 U		< 0.0050 U*		< 0.0100 U*	< 0.0200 U		< 0.0100 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
10/8/2001	MW-206B (100801)A		< 0.01 U		< 0.1 U		< 0.005 U		< 0.01 U	< 0.02 U		< 0.01 U		< 0.002 U		< 0.01 U		< 0.05 U
10/8/2001	MW-206B (100801)B		< 0.01 U		< 0.1 U		< 0.005 U		< 0.01 U	< 0.02 U		< 0.01 U		< 0.002 U		< 0.01 U		< 0.05 U
10/8/2001	MW-206B (100801)C		< 0.01 U		< 0.1 U		< 0.005 U		< 0.01 U	< 0.02 U		< 0.01 U		< 0.002 U		< 0.01 U		< 0.05 U
10/8/2001	MW-206B (100801)D		< 0.01 U		< 0.1 U		< 0.005 U		< 0.01 U	< 0.02 U		< 0.01 U		< 0.002 U		< 0.01 U		< 0.05 U
10/30/2001	206A (103001)		< 0.01 U		< 0.1 U		< 0.005 U		< 0.01 U	< 0.02 U		< 0.01 U		< 0.002 U		< 0.01 U		< 0.05 U
10/30/2001	206B (103001)		< 0.01 U		< 0.1 U		< 0.005 U		< 0.01 U	< 0.02 U		< 0.01 U		< 0.002 U		< 0.01 U		< 0.05 U
10/30/2001	206C (103001)		< 0.01 U		< 0.1 U		< 0.005 U		< 0.01 U	< 0.02 U		< 0.01 U		< 0.002 U		< 0.01 U		< 0.05 U
10/30/2001	206D (103001)		< 0.01 U		< 0.1 U		< 0.005 U		< 0.01 U	< 0.02 U		< 0.01 U		< 0.002 U		< 0.01 U		< 0.05 U
11/20/2001	206B (112001)A		0.036		< 0.1 U		< 0.005 U		< 0.01 U	< 0.02 U		< 0.01 U		< 0.002 U		0.0161		< 0.05 U
11/20/2001	206B (112001)B		0.0372		< 0.1 U		< 0.005 U		< 0.01 U	< 0.02 U		< 0.01 U		< 0.002 U		0.0193		< 0.05 U
11/20/2001	206B (112001)C		0.0377		< 0.1 U		< 0.005 U		< 0.01 U	< 0.02 U		< 0.01 U		< 0.002 U		0.0186		< 0.05 U
11/20/2001	206B (112001)D		0.0367		< 0.1 U		< 0.005 U		< 0.01 U	< 0.02 U		< 0.01 U		< 0.002 U		0.0171		< 0.05 U
5/29/2002	MW-206B (052902A)		< 0.0100 U*		< 0.1 U		< 0.0050 U*		< 0.0100 U*	< 0.02 U		< 0.0100 U *		< 0.002 U		< 0.01 U		< 0.05 U
5/29/2002	MW-206B (052902B)		< 0.05 U		< 0.1 U		< 0.01 U		< 0.05 U	< 0.02 U		< 0.05 U		< 0.002 U		< 0.01 U		< 0.05 U
5/29/2002	MW-206B (052902C)		< 0.05 U		< 0.1 U		< 0.01 U		< 0.05 U	< 0.02 U		< 0.05 U		< 0.002 U		< 0.01 U		< 0.05 U
5/29/2002	MW-206B (052902D)		< 0.05 U		< 0.1 U		< 0.01 U		< 0.05 U	< 0.02 U		< 0.05 U		< 0.002 U		< 0.01 U		< 0.05 U
11/20/2002	MW-206B (112002A)		< 0.0150 U*		< 0.1 U		< 0.005 U		< 0.0100 U*	< 0.02 U		< 0.0100 U *		< 0.002 U		< 0.01 U		< 0.05 U
11/20/2002	MW-206B (112002B)		< 0.05 U		< 0.1 U		< 0.005 U		< 0.05 U	< 0.02 U		< 0.05 U		< 0.002 U		< 0.01 U		< 0.05 U
11/20/2002	MW-206B (112002C)		< 0.05 U		< 0.1 U		< 0.005 U		< 0.05 U	< 0.02 U		< 0.05 U		< 0.002 U		< 0.01 U		< 0.05 U
11/20/2002	MW-206B (112002D)		< 0.05 U		< 0.1 U		< 0.005 U		< 0.05 U	< 0.02 U		< 0.05 U		< 0.002 U		< 0.01 U		< 0.05 U
5/21/2003	MW-206BA(052103)		< 0.0100 U*		< 0.100 U		< 0.00500 U		< 0.0100 U*	< 0.0200 U		< 0.0100 U*		< 0.00200 U		< 0.0100 U		< 0.0500 U
5/21/2003	MW-206BB(052103)		< 0.0500 U		< 0.100 U		< 0.00500 U		< 0.0500 U	0.214		< 0.0500 U		< 0.00200 U		< 0.0100 U		< 0.0500 U
5/21/2003	MW-206BC(052103)		< 0.0500 U		< 0.100 U		< 0.00500 U		< 0.0500 U	< 0.0200 U		< 0.0500 U		< 0.00200 U		< 0.0100 U		< 0.0500 U
5/21/2003	MW-206B(052103)		< 0.0500 U		< 0.100 U		< 0.00500 U		< 0.0500 U	< 0.0200 U		< 0.0500 U		< 0.00200 U		< 0.0100 U		< 0.0500 U
11/19/2003	MW-206BA(111903)		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0100 U*	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/19/2003	MW-206BB(111903)		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/19/2003	MW-206BC(111903)		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/19/2003	MW-206B(111903)		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/25/2004	MW-206B (A)-052504		< 0.0100 U		0.0885		< 0.00100 U		< 0.0100 U*	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/25/2004	MW-206B (B)-052504		< 0.0100 U		0.0884		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/25/2004	MW-206B (C)-052504		< 0.0100 U		0.0875		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/25/2004	MW-206B (D)-052504		< 0.0100 U		0.0889		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/11/2004	MW-206B (B)-111104		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/11/2004	MW-206B (C)-111104		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/11/2004	MW-206B (D)-111104		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0200 U	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/11/2004	MW-206B (A)-111104		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0100 U*	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/9/2005	MW-206B (A)		< 0.01 U		0.0989		< 0.001 U		< 0.0100 U*	< 0.02 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.01 U
5/9/2005	MW-206B (B)		< 0.01 U		0.0942		< 0.001 U		< 0.02 U	< 0.02 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.01 U
5/9/2005	MW-206B (C)		< 0.01 U		0.0967		< 0.001 U		< 0.02 U	< 0.02 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.01 U
5/9/2005	MW-206B (D)		0.0162		< 0.05 U		< 0.001 U		< 0.02 U	< 0.02 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.01 U
11/10/2005	MW-206B(A)~11/10/05		< 0.0100 U		0.0839 J		< 0.00500 U		< 0.0100 U	< 0.0100 U		< 0.00500 U		< 0.000200 U		< 0.0100 U		< 0.0100 U
11/10/2005	MW-206B(B)~11/10/05		< 0.0100 U		0.0802 J		< 0.00500 U		< 0.0100 U	< 0.0100 U		< 0.00500 U		< 0.000200 U		< 0.0100 U		< 0.0100 U
11/10/2005	MW-206B(C)~11/10/05		< 0.0100 U		0.0804 J		< 0.00500 U		< 0.0100 U	< 0.0100 U		< 0.00500 U		< 0.000200 U		0.0114		< 0.0100 U
11/10/2005	MW-206B(D)~11/10/05		< 0.0100 U		0.0793 J		< 0.00500 U		< 0.0100 U	< 0.0100 U		< 0.00500 U		< 0.000200 U		< 0.0100 U		< 0.0100 U
5/17/2006	MW-206B (A)~05/17/06	< 0.0100 U		0.100		< 0.00500 U		0.0266		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
5/17/2006	MW-206B (B)~05/17/06	< 0.0100 U		0.0986 J		< 0.00500 U		0.0550		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
5/17/2006	MW-206B (C)~05/17/06	< 0.0100 U		0.0966 J		< 0.00500 U		0.0176		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
5/17/2006	MW-206B (D)~05/17/06	< 0.0100 U		< 0.100 U		< 0.00500 U		0.0140		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
11/8/2006	MW-206B (110806)	< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
11/8/2006	FD-1 (110806)	< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
5/16/2007	MW-206B (051607)		< 0.0100 U		0.112		< 0.0050 U		0.0111	< 0.010 U		< 0.0050 U				< 0.0100 U		< 0.0500 U
5/16/2007	MW-206B (051607)-MISS-HG													< 0.0020 UJ				
5/16/2007	FD-1 (051607)		< 0.0100 U		0.113		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0050 U				< 0.0100 U		< 0.0500 U
5/16/2007	FD-1 (051607)-MISS-HG													< 0.0020 UJ				
11/15/2007	MW-206B (111507)		< 0.0100 U		< 0.1 U		< 0.0050 U		0.076	< 0.010 U		< 0.0100 U		< 0.0020 U		< 0.0100 U		< 0.0500 U

Table 1. Groundwater Analytical Data. Closed Hazardous Waste Surface Impoundment, Former Allison Gas Turbine Division -Plant 5, Indianapolis, Indiana, INR000021436.

Monitoring Well		Arsenic	Arsenic (dissolved)	Barium	Barium (dissolved)	Cadmium	Cadmium (dissolved)	Chromium	Chromium Total (dissolved)	Cyanide (total)	Lead	Lead (dissolved)	Mercury	Mercury (dissolved)	Selenium	Selenium (dissolved)	Silver	Silver (dissolved)
Sample Date	**Sample ID**																	
5/14/2008	MW-206B (051408)		< 0.0100 U		0.114		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0100 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
11/6/2008	MW-206B (110608)		< 0.0100 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.0050 U		< 0.0050 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
11/6/2008	FD-1 (110608)		< 0.0100 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.0050 U		< 0.0050 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
5/14/2009	MW-206B (051409)		< 0.0100 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0050 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
11/23/2009	MW-206B (112309)		< 0.005 U		< 0.1 U		< 0.005 U		< 0.01 U	< 0.01 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.05 U
11/23/2009	FD-1 (112309)		< 0.005 U		< 0.1 U		< 0.005 U		< 0.01 U	< 0.01 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.05 U
6/4/2010	MW-206B(060410)		< 0.0050 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0050 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
	Estimated Quantitiation Limits		0.0100		0.1000		0.0050		0.0100	0.0200		0.0100		0.0020		0.0100		0.0500

NOTES:
Concentrations are in mg/L.
* Reevaluation of Reporting limits provided by Pace Analytical Services, Inc. (letter dated April 28, 2006).

Table 2. Upgradient Monitoring Well MW-206B Background Data. Closed Hazardous Waste Surface Impoundment, Former Allison Gas Turbine Division -Plant 5, Indianapolis, Indiana, INR000021436.

Monitoring Well		Arsenic	Arsenic (dissolved)	Barium	Barium (dissolved)	Cadmium	Cadmium (dissolved)	Chromium	Chromium Total (dissolved)	Cyanide (total)	Lead	Lead (dissolved)	Mercury	Mercury (dissolved)	Selenium	Selenium (dissolved)	Silver	Silver (dissolved)
Sample Date	**Sample ID**																	
MW-206B																		
8/17/2001	MW-206B(8-17-01A)		< 0.0100 U*		< 0.100 U		< 0.0050 U*		< 0.0100 U*	< 0.0200 U		< 0.0100 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
10/8/2001	MW-206B (100801)A		< 0.01 U		< 0.1 U		< 0.005 U		< 0.01 U	< 0.02 U		< 0.01 U		< 0.002 U		< 0.01 U		< 0.05 U
10/30/2001	206A (103001)		< 0.01 U		< 0.1 U		< 0.005 U		< 0.01 U	< 0.02 U		< 0.01 U		< 0.002 U		< 0.01 U		< 0.05 U
11/20/2001	206B (112001)A		0.036		< 0.1 U		< 0.005 U		< 0.01 U	< 0.02 U		< 0.01 U		< 0.002 U		0.0161		< 0.05 U
5/29/2002	MW-206B (052902A)		< 0.0100 U*		< 0.1 U		< 0.0050 U*		< 0.0100 U*	< 0.02 U		< 0.0100 U *		< 0.002 U		< 0.01 U		< 0.05 U
11/20/2002	MW-206B (112002A)		< 0.0150 U*		< 0.1 U		< 0.005 U		< 0.0100 U*	< 0.02 U		< 0.0100 U *		< 0.002 U		< 0.01 U		< 0.05 U
5/21/2003	MW-206BA(052103)		< 0.0100 U*		< 0.100 U		< 0.00500 U		< 0.0100 U*	< 0.0200 U		< 0.0100 U*		< 0.00200 U		< 0.0100 U		< 0.0500 U
11/19/2003	MW-206BA(111903)		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0100 U*	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/25/2004	MW-206B (A)-052504		< 0.0100 U		0.0885		< 0.00100 U		< 0.0100 U*	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
11/11/2004	MW-206B (A)-111104		< 0.0100 U		< 0.0500 U		< 0.00100 U		< 0.0100 U*	< 0.0200 U		< 0.00500 U		< 0.00200 U		< 0.0100 U		< 0.0100 U
5/9/2005	MW-206B (A)		< 0.01 U		0.0989		< 0.001 U		< 0.0100 U*	< 0.02 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.01 U
11/10/2005	MW-206B(A)~11/10/05		< 0.0100 U		0.0839 J		< 0.00500 U		< 0.0100 U	< 0.0100 U		< 0.00500 U		< 0.000200 U		< 0.0100 U		< 0.0100 U
5/17/2006	MW-206B (A)~05/17/06	< 0.0100 U		0.100		< 0.00500 U		0.0266		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
11/8/2006	MW-206B (110806)	< 0.0100 U		< 0.100 U		< 0.00500 U		< 0.0100 U		< 0.0200 U	< 0.0100 U		< 0.00200 U		< 0.0100 U		< 0.0500 U	
5/16/2007	MW-206B (051607)		< 0.0100 U		0.112		< 0.0050 U		0.0111	< 0.010 U		< 0.0050 U				< 0.0100 U		< 0.0500 U
5/16/2007	MW-206B (051607)-MISS-HG													< 0.0020 UJ				
11/15/2007	MW-206B (111507)		< 0.0100 U		< 0.1 U		< 0.0050 U		0.076	< 0.010 U		< 0.0100 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
5/14/2008	MW-206B (051408)		< 0.0100 U		0.114		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0100 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
11/6/2008	MW-206B (110608)		< 0.0100 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.0050 U		< 0.0050 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
5/14/2009	MW-206B (051409)		< 0.0100 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0050 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
11/23/2009	MW-206B (112309)		< 0.005 U		< 0.1 U		< 0.005 U		< 0.01 U	< 0.01 U		< 0.005 U		< 0.002 U		< 0.01 U		< 0.05 U
6/4/2010	MW-206B(060410)		< 0.0050 U		< 0.1 U		< 0.0050 U		< 0.0100 U	< 0.010 U		< 0.0050 U		< 0.0020 U		< 0.0100 U		< 0.0500 U
	Estimated Quantitiation Limits		0.0100		0.1000		0.0050		0.0100		0.0200	0.0100		0.0020		0.0100		0.0500

NOTES:
Concentrations are in mg/L.

ARCADIS

Attachment 1

Groundwater Sampling Field Sheets

MW-201B

WELL PURGING FIELD INFORMATION FORM

JOB# 1N2917-119

SITE/PROJECT NAME: Surface Impoundment

WELL# MW-201B

WELL PURGING INFORMATION

PURGE DATE (MM DD YY)	SAMPLE DATE (MM DD YY)	WATER VOL. IN CASING (LITRES/GALLONS)	ACTUAL VOLUME PURGED (LITRES/GALLONS)
6/4/10	6/4/10		

PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED Y N (CIRCLE ONE)

SAMPLING EQIPMENT.....DEDICATED Y N (CIRCLE ONE)

PURGING DEVICE		A - SUBMERSIBLE PUMP	D - GAS LIFT PUMP	G - BAILER	X- PURGING OTHER (SPECIFY)
SAMPLING DEVICE		B - PERISTALTIC PUMP C - BLADDER PUMP	E - PURGE PUMP F - DIPPER BOTTLE	H - WATERRA®	X- SAMPLING OTHER (SPECIFY)
PURGING DEVICE		A - TEFLON B - STAINLESS STEEL	D - PVC E - POLYETHYLENE		X- PURGING OTHER (SPECIFY)
SAMPLING DEVICE		C - POLYPROPYLENE			X- SAMPLING OTHER (SPECIFY)
PURGING DEVICE		A - TEFLON B - TYGON	D - POLYPROPYLENE E - POLYETHYLENE	F - SILICONE G - COMBINATION TEFLON/POLYPROPYLENE	X- PURGING OTHER (SPECIFY)
SAMPLING DEVICE		C - ROPE	X- (SPECIFY)		X- SAMPLING OTHER (SPECIFY)
FILTERING DEVICES 0.45		A - IN-LINE DISPOSABLE	B - PRESSURE	C - VACUUM	

FIELD MEASUREMENTS

WELL ELEVATION	(m/ft)	GROUNDWATER ELEVATION	(m/ft)
DEPTH TO WATER	21.75 (m/ft)	WELL DEPTH	38.20 (m/ft)

pH	TURBIDITY	CONDUCTIVITY	ORP	DO	SAMPLE TEMPERATURE
7.6 (std)	39.3 (ntu)	819 (µm/cm) AT 25°C	[illegible] (mV)	0.21 (mg/L)	22.7 (°C)
(std)	(ntu)	(µm/cm) AT 25°C	160 (mV)	(mg/L)	(°C)
(std)	(ntu)	(µm/cm) AT 25°C	(mV)	(mg/L)	(°C)
(std)	(ntu)	(µm/cm) AT 25°C	(mV)	(mg/L)	(°C)
(std)	(ntu)	(µm/cm) AT 25°C	(mV)	(mg/L)	(°C)

FIELD COMMENTS

SAMPLE APPEARANCE: Clear ODOR: NA COLOR: Clear TURBIDITY:

WEATHER CONDITIONS: WIND SPEED DIRECTION PRECIPITATION Y/N OUTLOOK

SPECIFIC COMMENTS: Sampled @ 0935 on 6/4/10

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE GM PROTOCOLS

DATE	PRINT	SIGNATURE
6/4/10	Tim Parker	

FMG MODIFICATIONS MUST BE ACCOMPANIED BY A REVISION REQUEST FORM APPROVED BY THE PROJECT MANAGER

17300 (2) PART C FMG-06-4-01
Revision 3, October 29, 2002

Figure 2: Well Purging Field Information Form. Resubmitted August 2006

MONITORING WELL RECORD FOR LOW-FLOW PURGING

Project Data:

Project Name: Surface Impoundment
Ref. No.: IWC97.19

Date: 6/4/10
Personnel: TP

Monitoring Well Data:

Well No.: MW-201B
Measurement Point: TOC
Constructed Well Depth (ft):
Measured Well Depth (ft): 38.20
Depth of Sediment (ft):

Screen Length (ft):
Depth to Pump Intake (ft)[1]: 33'
Well Diameter, D (in):
Well Screen Volume, V_s (mL)[2]:
Initial Depth to Water (ft): 21.75

Time	Pumping Rate (mL/min)	Depth to Water (ft)	Drawdown from Initial Water Level[3] (ft)	pH	Temperature °C	Conductivity (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Volume Purged, Vp (mL)	No. of Well Screen Volumes Purged[4]
0853	300	21.69	-0.06	7.27	22.78	0.8267	189	0.67	-15.40		
0856	300	21.71	-0.04	7.43	22.65	0.8218	183	0.47	-27.24		
0859	300	21.71	-0.04	7.50	22.56	0.8186	179	0.37	-30.32		
0902	300	21.73	-0.02	7.54	22.54	0.8178	175	0.31	-33.64		
0905	300	21.70	-0.05	7.56	22.52	0.8169	171	0.28	-36.11		
0908	300	21.73	-0.02	7.58	22.54	0.8177	169	0.26	-35.88		
0911	300	21.70	-0.05	7.58	22.66	0.8193	167	0.25	-35.01		
0914	300	21.70	-0.05	7.59	22.71	0.8200	166	0.24	-37.86		
0917	300	21.70	-0.05	7.60	22.76	0.8210	164	0.24	-38.25		
0920	300	21.70	-0.05	7.61	22.60	0.8172	163	0.24	-38.47		
0923	300	21.70	-0.05	7.61	22.41	0.8148	162	0.23	-36.96		
0926	300	21.70	-0.05	7.61	22.48	0.8160	161	0.22	-37.71		
0929	300	21.70	-0.05	7.61	22.63	0.8182	160	0.22	-38.07		

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 5-foot screen length, $V_s = p*(D/2)^2*(5*12)*(2.54)^3$

(3) The drawdown from the initial water level should not exceed 0.3 ft.

(4) Purging will continue until stabilization is achieved or until 3 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stablization criteria and appear to be stablizing), No. of Well Screen Volumes Purged= Vp/Vs.

Figure 3: Monitoring Well Record for Low-Flow Purging.
Resubmitted August 2006

MONITORING WELL RECORD FOR LOW-FLOW PURGING

Project Data:

Project Name: MW-201B (cont.)
Ref. No.:

Date: 6/4/10
Personnel: TP

Monitoring Well Data:

Well No.: MW-201B
Measurement Point: TOC
Constructed Well Depth (ft):
Measured Well Depth (ft): 39.20
Depth of Sediment (ft):

Screen Length (ft):
Depth to Pump Intake (ft)[1]: 33'
Well Diameter, D (in):
Well Screen Volume, V_s (mL)[2]:
Initial Depth to Water (ft): 21.75

Time	Pumping Rate (mL/min)	Depth to Water (ft)	Drawdown from Initial Water Level[3] (ft)	pH	Temperature °C	Conductivity (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Volume Purged, V_p (mL)	No. of Well Screen Volumes Purged[4]
0932	300	21.70	-0.05	7.62	22.71	0.8197	180	0.21	-39.13	3.09	
0935											
0939											

Sample collected @ 0935

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 5-foot screen length, $V_s = p*(D/2)^2*(5*12)*(2.54)^3$

(3) The drawdown from the initial water level should not exceed 0.3 ft.

(4) Purging will continue until stabilization is achieved or until 3 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stablization criteria and appear to be stablizing), No. of Well Screen Volumes Purged= Vp/Vs.

Figure 3: Monitoring Well Record for Low-Flow Purging.

Resubmitted August 2006

MW-202B

WELL PURGING FIELD INFORMATION FORM

JOB# 1W2971-19

SITE/PROJECT NAME: Surface Impoundment WELL# MW-202B

WELL PURGING INFORMATION

PURGE DATE (MM DD YY)	SAMPLE DATE (MM DD YY)	WATER VOL. IN CASING (LITRES/GALLONS)	ACTUAL VOLUME PURGED (LITRES/GALLONS)
6/4/10	6/4/10		

PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT.....DEDICATED Y N (CIRCLE ONE)

SAMPLING EQIPMENT.....DEDICATED Y N (CIRCLE ONE)

PURGING DEVICE	E	A - SUBMERSIBLE PUMP B - PERISTALTIC PUMP	D - GAS LIFT PUMP E - PURGE PUMP	G - BAILER H - WATERRA®	X- PURGING OTHER (SPECIFY)
SAMPLING DEVICE	C	C - BLADDER PUMP	F - DIPPER BOTTLE		X- SAMPLING OTHER (SPECIFY)
PURGING DEVICE	B	A - TEFLON B - STAINLESS STEEL	D - PVC E - POLYETHYLENE		X- PURGING OTHER (SPECIFY)
SAMPLING DEVICE	E	C - POLYPROPYLENE			X- SAMPLING OTHER (SPECIFY)
PURGING DEVICE		A - TEFLON B - TYGON	D - POLYPROPYLENE E - POLYETHYLENE	F - SILICONE G - COMBINATION TEFLON/POLYPROPYLENE	X- PURGING OTHER (SPECIFY)
SAMPLING DEVICE	C	C - ROPE	X- (SPECIFY)		X- SAMPLING OTHER (SPECIFY)
FILTERING DEVICES 0.45		A - IN-LINE DISPOSABLE	B - PRESSURE	C - VACUUM	

FIELD MEASUREMENTS

WELL ELEVATION	(m/ft)	GROUNDWATER ELEVATION	(m/ft)
DEPTH TO WATER	21.30 (m/ft)	WELL DEPTH	37.60 (m/ft)

pH	TURBIDITY	CONDUCTIVITY	ORP	DO	SAMPLE TEMPERATURE
7.5 (std)	29 (ntu)	7127 (µm/cm) AT 25°C	154 (mV)	2.96 (mg/L)	19.1 (°C)
(std)	(ntu)	(µm/cm) AT 25°C	(mV)	(mg/L)	(°C)
(std)	(ntu)	(µm/cm) AT 25°C	(mV)	(mg/L)	(°C)
(std)	(ntu)	(µm/cm) AT 25°C	(mV)	(mg/L)	(°C)
(std)	(ntu)	(µm/cm) AT 25°C	(mV)	(mg/L)	(°C)

FIELD COMMENTS

SAMPLE APPEARANCE: Clear ODOR: NA COLOR: Clear TURBIDITY:

WEATHER CONDITIONS: WIND SPEED DIRECTION PRECIPITATION Y/N OUTLOOK

SPECIFIC COMMENTS Sampled @ 1100 on 6/4/10

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE GM PROTOCOLS

DATE	PRINT	SIGNATURE
6/4/10	Tim Parker	T. P.

FMG MODIFICATIONS MUST BE ACCOMPANIED BY A REVISION REQUEST FORM APPROVED BY THE PROJECT MANAGER

17300 (2) PART C FMG-06-4-01
Revision 3, October 29, 2002

Figure 2: Well Purging Field Information Form.
Resubmitted August 2006

MONITORING WELL RECORD FOR LOW-FLOW PURGING

Project Data:

Project Name: Surface Impoundment
Ref. No.: In 297.19

* Re-calibrate Turbidity sensor prior to purging this well. TR T=18

Date: 6/4/10
Personnel: TP

Monitoring Well Data:

Well No.: MW-202B
Measurement Point: TOC
Constructed Well Depth (ft):
Measured Well Depth (ft): 37.60
Depth of Sediment (ft):

Screen Length (ft):
Depth to Pump Intake (ft)[1]: 32.6
Well Diameter, D (in):
Well Screen Volume, V_s (mL)[2]:
Initial Depth to Water (ft): 21.30

Time	Pumping Rate (mL/min)	Depth to Water (ft)	Drawdown from Initial Water Level[3] (ft)	pH	Temperature °C	Conductivity (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Volume Purged, V_p (mL)	No. of Well Screen Volumes Purged[4]
1030	300	21.20	-0.10	7.57	19.94	0.7409	158	3.17	158.8		
1033	300	21.2	-0.1	7.52	19.78	0.7348	157	3.06	116.6		
1036	300	21.2	-0.1	7.53	19.35	0.7275	156	3.03	76.57		
1039	300	21.2	-0.1	7.54	19.27	0.7282	156	3.02	42.97		
1042	300	21.2	-0.1	7.55	19.17	0.7262	155	3.01	23.56		
1045	300	21.2	-0.1	7.55	19.20	0.7249	155	3.00	15.83		
1048	300	21.2	-0.1	7.55	19.05	0.7254	154	3.00	8.981		
1051	300	21.2	-0.1	7.55	19.23	0.7263	154	2.98	4.208		
1054	300	21.2	-0.1	7.55	19.14	0.7273	154	2.97	4.443		
1057	300	21.2	-0.1	7.55	19.15	0.7270	154	2.96	1.412	2.14	
1106											

Sampled @ 1100 on 6/4/10 TR T=2L

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 5-foot screen length, $V_s = p*(D/2)^2*(5*12)*(2.54)^3$

(3) The drawdown from the initial water level should not exceed 0.3 ft.

(4) Purging will continue until stabilization is achieved or until 3 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stablization criteria and appear to be stablizing), No. of Well Screen Volumes Purged= Vp/Vs.

Figure 3: Monitoring Well Record for Low-Flow Purging.

Resubmitted August 2006

MW-203B

WELL PURGING FIELD INFORMATION FORM

SITE/PROJECT NAME: Surface Impoundment

JOB# 1N297.19

WELL# MW-203B

WELL PURGING INFORMATION

PURGE DATE (MM DD YY)	SAMPLE DATE (MM DD YY)	WATER VOL. IN CASING (LITRES/GALLONS)	ACTUAL VOLUME PURGED (LITRES/GALLONS)
060410	060410		

PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT DEDICATED Y N (CIRCLE ONE)

SAMPLING EQIPMENT DEDICATED Y N (CIRCLE ONE)

PURGING DEVICE: A - SUBMERSIBLE PUMP; B - PERISTALTIC PUMP; D - GAS LIFT PUMP; E - PURGE PUMP; G - BAILER; H - WATERRA®

SAMPLING DEVICE: C - BLADDER PUMP; F - DIPPER BOTTLE

X- PURGING OTHER (SPECIFY)

X- SAMPLING OTHER (SPECIFY)

PURGING DEVICE: A - TEFLON; B - STAINLESS STEEL; D - PVC; E - POLYETHYLENE

SAMPLING DEVICE: C - POLYPROPYLENE

X- PURGING OTHER (SPECIFY)

X- SAMPLING OTHER (SPECIFY)

PURGING DEVICE: A - TEFLON; B - TYGON; D - POLYPROPYLENE; E - POLYETHYLENE; F - SILICONE; G - COMBINATION TEFLON/POLYPROPYLENE

SAMPLING DEVICE: C - ROPE; X- (SPECIFY)

X- PURGING OTHER (SPECIFY)

X- SAMPLING OTHER (SPECIFY)

FILTERING DEVICES 0.45: A - IN-LINE DISPOSABLE; B - PRESSURE; C - VACUUM

FIELD MEASUREMENTS

WELL ELEVATION	(m/ft)	GROUNDWATER ELEVATION	(m/ft)
DEPTH TO WATER 19.17	(m/ft)	WELL DEPTH 34.15	(m/ft)

pH	TURBIDITY	CONDUCTIVITY	ORP	DO	SAMPLE TEMPERATURE
7.1 (std)	04 (ntu)	815 (µm/cm) AT 25°C	140 (mV)	3.54 (mg/L)	16.7 (°C)
(std)	(ntu)	(µm/cm) AT 25°C	(mV)	(mg/L)	(°C)
(std)	(ntu)	(µm/cm) AT 25°C	(mV)	(mg/L)	(°C)
(std)	(ntu)	(µm/cm) AT 25°C	(mV)	(mg/L)	(°C)
(std)	(ntu)	(µm/cm) AT 25°C	(mV)	(mg/L)	(°C)

FIELD COMMENTS

SAMPLE APPEARANCE: clear ODOR: NA COLOR: clear TURBIDITY

WEATHER CONDITIONS WIND SPEED DIRECTION PRECIPITATION Y/N OUTLOOK

SPECIFIC COMMENTS: Sampled 1220am 6/4/10

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE GM PROTOCOLS

DATE 6/4/10 PRINT T. Wolfe SIGNATURE

FMG MODIFICATIONS MUST BE ACCOMPANIED BY A REVISION REQUEST FORM APPROVED BY THE PROJECT MANAGER

MONITORING WELL RECORD FOR LOW-FLOW PURGING

Project Data:

Project Name: Surface Impoundment
Ref. No.: 1w 297.19

Date: 6/4/10
Personnel: TP

Monitoring Well Data:

Well No.: MW-203B
Measurement Point: TOC
Constructed Well Depth (ft):
Measured Well Depth (ft): 34.15
Depth of Sediment (ft):

Screen Length (ft):
Depth to Pump Intake (ft)[1]: 29.15
Well Diameter, D (in):
Well Screen Volume, V_s (mL)[2]:
Initial Depth to Water (ft): 19.17

Time	Pumping Rate (mL/min)	Depth to Water (ft)	Drawdown from Initial Water Level[3] (ft)	pH	Temperature °C	Conductivity (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Volume Purged, V_p (mL)	No. of Well Screen Volumes Purged[4]
1145	300	19.15	-0.02	7.17	18.42	0.8571	158	5.71	74.40		
1148	300	19.16	-0.01	7.09	17.55	0.8392	160	5.63	71.41		
1151	300	19.16	-0.01	7.08	17.02	0.8371	160	5.26	43.84		
1154	300	19.16	-0.01	7.08	16.84	0.8374	159	4.88	30.61		
1157	300	19.16	-0.01	7.07	16.77	0.8484	156	4.20	17.86		
1200	300	19.16	-0.01	7.07	16.79	0.8558	151	3.77	11.28		
1203	300	19.16	-0.01	7.07	16.70	0.8592	145	3.50	5.399		
1206	300	19.16	-0.01	7.07	16.69	0.8609	141	3.31	59.62		
1209	300	19.16	-0.01	7.09	16.61	0.8579	140	3.45	35.44		
1212	300	19.16	-0.01	7.09	16.34	0.8535	140	3.44	13.05		
1215	300	19.16	-0.01	7.09	16.65	0.8574	140	3.45	4.258		
1218	300	19.16	-0.01	7.09	16.77	0.8579	140	3.54	0.4720	2.62	
1221											

Notes:

Sampled @ 1270 on 6/4/10

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 5-foot screen length, $V_s = p*(D/2)^2*(5*12)*(2.54)^3$

(3) The drawdown from the initial water level should not exceed 0.3 ft.

(4) Purging will continue until stabilization is achieved or until 3 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stablization criteria and appear to be stablizing), No. of Well Screen Volumes Purged= V_p/V_s.

MW-206B

WELL PURGING FIELD INFORMATION FORM

JOB# 1W29719

SITE/PROJECT NAME: Surface Impoundment

WELL# MW-206B

WELL PURGING INFORMATION

PURGE DATE (MM DD YY)	SAMPLE DATE (MM DD YY)	WATER VOL IN CASING (LITRES/GALLONS)	ACTUAL VOLUME PURGED (LITRES/GALLONS)
6/4/10	6/4/10		

PURGING AND SAMPLING EQUIPMENT

PURGING EQUIPMENT ... DEDICATED Y N (CIRCLE ONE)

SAMPLING EQIPMENT DEDICATED Y N (CIRCLE ONE)

PURGING DEVICE		A - SUBMERSIBLE PUMP	D - GAS LIFT PUMP	G - BAILER	X- PURGING OTHER (SPECIFY)
		B - PERISTALTIC PUMP	E - PURGE PUMP	H - WATERRA®	
SAMPLING DEVICE		C - BLADDER PUMP	F - DIPPER BOTTLE		X- SAMPLING OTHER (SPECIFY)
PURGING DEVICE		A - TEFLON	D - PVC		X- PURGING OTHER (SPECIFY)
		B - STAINLESS STEEL	E - POLYETHYLENE		
SAMPLING DEVICE		C - POLYPROPYLENE			X- SAMPLING OTHER (SPECIFY)
PURGING DEVICE		A - TEFLON	D - POLYPROPYLENE	F - SILICONE	X- PURGING OTHER (SPECIFY)
		B - TYGON	E - POLYETHYLENE	G - COMBINATION TEFLON/POLYPROPYLENE	
SAMPLING DEVICE		C - ROPE	X- (SPECIFY)		X- SAMPLING OTHER (SPECIFY)
FILTERING DEVICES 0.45		A - IN-LINE DISPOSABLE	B - PRESSURE	C - VACUUM	

FIELD MEASUREMENTS

WELL ELEVATION		(m/ft)	GROUNDWATER ELEVATION	(m/ft)
DEPTH TO WATER	19.60	(m/ft)	WELL DEPTH	37.70 (m/ft)

pH	TURBIDITY	CONDUCTIVITY	ORP	DO	SAMPLE TEMPERATURE
7.06 (std)	-4 (ntu)	938 (µm/cm) AT 25°C	48 (mV)	0.06 (mg/L)	19.6 (°C)
(std)	(ntu)	(µm/cm) AT 25°C	(mV)	(mg/L)	(°C)
(std)	(ntu)	(µm/cm) AT 25°C	(mV)	(mg/L)	(°C)
(std)	(ntu)	(µm/cm) AT 25°C	(mV)	(mg/L)	(°C)
(std)	(ntu)	(µm/cm) AT 25°C	(mV)	(mg/L)	(°C)

FIELD COMMENTS

SAMPLE APPEARANCE clear ODOR: NA COLOR: clear TURBIDITY

WEATHER CONDITIONS WIND SPEED DIRECTION PRECIPITATION Y/N OUTLOOK

SPECIFIC COMMENTS

Sampled 1405 on 6/4/10

I CERTIFY THAT SAMPLING PROCEDURES WERE IN ACCORDANCE WITH APPLICABLE GM PROTOCOLS

DATE	PRINT	SIGNATURE
6/4/10	Tim Fork	TF

FMG MODIFICATIONS MUST BE ACCOMPANIED BY A REVISION REQUEST FORM APPROVED BY THE PROJECT MANAGER

MONITORING WELL RECORD FOR LOW-FLOW PURGING

Project Data:

Project Name: Surface Impoundments
Ref. No.: 12297.19

Date: 6/4/10
Personnel: AF

Monitoring Well Data:

Well No.: MW-206B
Measurement Point: TOC
Constructed Well Depth (ft):
Measured Well Depth (ft): 37.70
Depth of Sediment (ft):

Screen Length (ft):
Depth to Pump Intake (ft)[1]: 32.7
Well Diameter, D (in):
Well Screen Volume, V_s (mL)[2]:
Initial Depth to Water (ft): 19.60

Time	Pumping Rate (mL/min)	Depth to Water (ft)	Drawdown from Initial Water Level[3] (ft)	pH	Temperature °C	Conductivity (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Volume Purged, V_p (mL)	No. of Well Screen Volumes Purged[4]
1320	300	19.61	0.01	7.02	20.20	0.9517	131	0.28	81.47		
1323	300	19.61	0.01	Missed				0.20	61.04		
1326	300	19.61	0.01	7.03	19.68	0.9395	108	0.16	52.52		
1329	300	19.61	0.01	7.04	19.58	0.9366	98	0.14	45.29		
1332	300	19.61	0.01	7.04	19.37	0.9338	90	0.12	33.74		
1335	300	19.61	0.01	7.05	19.36	0.9338	83	0.11	34.93		
1338	300	19.61	0.01	7.05	19.45	0.9355	78	0.10	26.06		
1341	300	19.61	0.01	7.05	19.38	0.9357	73	0.09	23.49		
1344	300	19.61	0.01	7.05	19.27	0.9320	69	0.09	22.72		
1347	300	19.61	0.01	7.05	19.51	0.9369	64	0.08	20.80		
1350	300	19.61	0.01	7.06	18.27	0.9359	60	0.08	18.27		
1353	300	19.61	0.01	7.06	19.49	0.9367	56	0.07	8.861		
1356	300	19.61	0.01	7.06	19.56	0.9386	53	0.07	8.342		

Notes:

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 5-foot screen length, $V_s = p*(D/2)^2*(5*12)*(2.54)^3$

(3) The drawdown from the initial water level should not exceed 0.3 ft.

(4) Purging will continue until stabilization is achieved or until 3 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stablization criteria and appear to be stablizing), No. of Well Screen Volumes Purged= Vp/Vs.

MONITORING WELL RECORD FOR LOW-FLOW PURGING

Project Data:

Project Name: Surface Impoundment
Ref. No.: IN 297.19

Date: 6/4/10
Personnel: TP

Monitoring Well Data:

Well No.: MW-206B (cont.)
Measurement Point: TOC
Constructed Well Depth (ft):
Measured Well Depth (ft): 37.70
Depth of Sediment (ft):

Screen Length (ft):
Depth to Pump Intake (ft)[1]: 32.7
Well Diameter, D (in):
Well Screen Volume, V_s (mL)[2]:
Initial Depth to Water (ft): 19.60

Time	Pumping Rate (mL/min)	Depth to Water (ft)	Drawdown from Initial Water Level[3] (ft)	pH	Temperature °C	Conductivity (mS/cm)	ORP (mV)	DO (mg/L)	Turbidity (NTU)	Volume Purged, V_p (mL)	No. of Well Screen Volumes Purged[4]
1359	300	19.61	0.01	7.06	19.52	0.9382	50	0.07	-2997		
1402	~~300~~	19.61	~~0.01~~	7.06	19.61	0.9389	48	0.06	-4.942	~~3.33~~	
1405											

Notes: Sampled @ 1405 on 6/4/10 * Turbidity acting funny * TP

(1) The pump intake will be placed at the well screen mid-point or at a minimum of 2 ft above any sediment accumulated at the well bottom.

(2) The well screen volume will be based on a 5-foot screen length, $V_s = p*(D/2)^2*(5*12)*(2.54)^3$

(3) The drawdown from the initial water level should not exceed 0.3 ft.

(4) Purging will continue until stabilization is achieved or until 3 well screen volumes have been purged (unless purge water remains visually turbid and appears to be clearing, or unless stabilization parameters are varying slightly outside of the stablization criteria and appear to be stablizing), No. of Well Screen Volumes Purged= Vp/Vs.

Figure 3: Monitoring Well Record for Low-Flow Purging.

Resubmitted August 2006

ARCADIS

Attachment 2

Laboratory Analytical Report

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

June 17, 2010

Ms. Sarah Fisher
Arcadis U.S., Inc.
251 E. Ohio Street
Suite 800
Indianapolis, IN 46204

RE: Project: Rolls Royce/IN000297.0019
Pace Project No.: 5038203

Dear Ms. Fisher:
Enclosed are the analytical results for sample(s) received by the laboratory on June 04, 2010. The results relate only to the samples included in this report. Results reported herein conform to the most current NELAC standards, where applicable, unless otherwise narrated in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Donna S. Spyker

Donna Spyker

donna.spyker@pacelabs.com
Project Manager

7726 Moller Road Indianapolis, IN 46268
Illinois/NELAC Certification #: 100418
Indiana Certification #: C-49-06
Kansas Certification #: E-10247
Kentucky Certification #: 0042
Ohio VAP: CL0065
Pennsylvania: 68-00791
West Virginia Certification #: 330

Enclosures

Pace Analytical Services, Inc.
7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

SAMPLE SUMMARY

Project: Rolls Royce/IN000297.0019
Pace Project No.: 5038203

Lab ID	Sample ID	Matrix	Date Collected	Date Received
5038203001	**MW-201B(060410)**	Water	06/04/10 09:35	06/04/10 15:24
5038203002	**MW-202B(060410)**	Water	06/04/10 11:00	06/04/10 15:24
5038203003	**MW-203B(060410)**	Water	06/04/10 12:20	06/04/10 15:24
5038203004	**FD-1(060410)-TP**	Water	06/04/10 08:00	06/04/10 15:24
5038203005	**MW-206B(060410)**	Water	06/04/10 14:05	06/04/10 15:24
5038203006	**EB-1(060410)-TP**	Water	06/04/10 11:10	06/04/10 15:24

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(317)875-5894

SAMPLE ANALYTE COUNT

Project: Rolls Royce/IN000297.0019
Pace Project No.: 5038203

Lab ID	Sample ID	Method	Analysts	Analytes Reported
5038203001	**MW-201B(060410)**	EPA 6010	FRW	7
		EPA 7470	RAK	1
		EPA 9012	TPD	1
5038203002	**MW-202B(060410)**	EPA 6010	FRW	7
		EPA 7470	RAK	1
		EPA 9012	TPD	1
5038203003	**MW-203B(060410)**	EPA 6010	FRW	7
		EPA 7470	RAK	1
		EPA 9012	TPD	1
5038203004	**FD-1(060410)-TP**	EPA 6010	FRW	7
		EPA 7470	RAK	1
		EPA 9012	TPD	1
5038203005	**MW-206B(060410)**	EPA 6010	FRW	7
		EPA 7470	RAK	1
		EPA 9012	TPD	1
5038203006	**EB-1(060410)-TP**	EPA 6010	FRW	7
		EPA 7470	RAK	1
		EPA 9012	TPD	1

Pace Analytical Services, Inc.
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Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Rolls Royce/IN000297.0019
Pace Project No.: 5038203

Sample: MW-201B(060410) **Lab ID: 5038203001** Collected: 06/04/10 09:35 Received: 06/04/10 15:24 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic, Dissolved	ND	ug/L	5.0	1	06/11/10 00:00	06/15/10 15:48	7440-38-2	
Barium, Dissolved	ND	ug/L	100	1	06/11/10 00:00	06/15/10 15:48	7440-39-3	
Cadmium, Dissolved	ND	ug/L	5.0	1	06/11/10 00:00	06/15/10 15:48	7440-43-9	
Chromium, Dissolved	ND	ug/L	10.0	1	06/11/10 00:00	06/15/10 15:48	7440-47-3	
Lead, Dissolved	ND	ug/L	5.0	1	06/11/10 00:00	06/15/10 15:48	7439-92-1	
Selenium, Dissolved	ND	ug/L	10.0	1	06/11/10 00:00	06/15/10 15:48	7782-49-2	
Silver, Dissolved	ND	ug/L	50.0	1	06/11/10 00:00	06/15/10 15:48	7440-22-4	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury, Dissolved	ND	ug/L	2.0	1	06/14/10 00:00	06/15/10 10:34	7439-97-6	
9012 Cyanide, Total	Analytical Method: EPA 9012							
Cyanide	ND	mg/L	0.010	1		06/17/10 10:53	57-12-5	

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Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Rolls Royce/IN000297.0019
Pace Project No.: 5038203

Sample: MW-202B(060410) **Lab ID: 5038203002** Collected: 06/04/10 11:00 Received: 06/04/10 15:24 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic, Dissolved	ND	ug/L	5.0	1	06/11/10 00:00	06/16/10 08:56	7440-38-2	
Barium, Dissolved	ND	ug/L	100	1	06/11/10 00:00	06/16/10 08:56	7440-39-3	
Cadmium, Dissolved	ND	ug/L	5.0	1	06/11/10 00:00	06/16/10 08:56	7440-43-9	
Chromium, Dissolved	ND	ug/L	10.0	1	06/11/10 00:00	06/16/10 08:56	7440-47-3	
Lead, Dissolved	ND	ug/L	5.0	1	06/11/10 00:00	06/16/10 08:56	7439-92-1	
Selenium, Dissolved	ND	ug/L	10.0	1	06/11/10 00:00	06/16/10 08:56	7782-49-2	
Silver, Dissolved	ND	ug/L	50.0	1	06/11/10 00:00	06/16/10 08:56	7440-22-4	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury, Dissolved	ND	ug/L	2.0	1	06/14/10 00:00	06/15/10 10:35	7439-97-6	
9012 Cyanide, Total	Analytical Method: EPA 9012							
Cyanide	ND	mg/L	0.010	1		06/17/10 10:55	57-12-5	

Pace Analytical Services, Inc.
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Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Rolls Royce/IN000297.0019
Pace Project No.: 5038203

Sample: MW-203B(060410) **Lab ID: 5038203003** Collected: 06/04/10 12:20 Received: 06/04/10 15:24 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic, Dissolved	ND	ug/L	5.0	1	06/11/10 00:00	06/16/10 09:01	7440-38-2	
Barium, Dissolved	ND	ug/L	100	1	06/11/10 00:00	06/16/10 09:01	7440-39-3	
Cadmium, Dissolved	ND	ug/L	5.0	1	06/11/10 00:00	06/16/10 09:01	7440-43-9	
Chromium, Dissolved	ND	ug/L	10.0	1	06/11/10 00:00	06/16/10 09:01	7440-47-3	
Lead, Dissolved	ND	ug/L	5.0	1	06/11/10 00:00	06/16/10 09:01	7439-92-1	
Selenium, Dissolved	ND	ug/L	10.0	1	06/11/10 00:00	06/16/10 09:01	7782-49-2	
Silver, Dissolved	ND	ug/L	50.0	1	06/11/10 00:00	06/16/10 09:01	7440-22-4	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury, Dissolved	ND	ug/L	2.0	1	06/14/10 00:00	06/15/10 10:36	7439-97-6	
9012 Cyanide, Total	Analytical Method: EPA 9012							
Cyanide	ND	mg/L	0.010	1		06/17/10 10:56	57-12-5	

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7726 Moller Road
Indianapolis, IN 46268
(317)875-5894

ANALYTICAL RESULTS

Project: Rolls Royce/IN000297.0019
Pace Project No.: 5038203

Sample: FD-1(060410)-TP **Lab ID: 5038203004** Collected: 06/04/10 08:00 Received: 06/04/10 15:24 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic, Dissolved	ND	ug/L	5.0	1	06/11/10 00:00	06/16/10 09:07	7440-38-2	
Barium, Dissolved	ND	ug/L	100	1	06/11/10 00:00	06/16/10 09:07	7440-39-3	
Cadmium, Dissolved	ND	ug/L	5.0	1	06/11/10 00:00	06/16/10 09:07	7440-43-9	
Chromium, Dissolved	ND	ug/L	10.0	1	06/11/10 00:00	06/16/10 09:07	7440-47-3	
Lead, Dissolved	ND	ug/L	5.0	1	06/11/10 00:00	06/16/10 09:07	7439-92-1	
Selenium, Dissolved	ND	ug/L	10.0	1	06/11/10 00:00	06/16/10 09:07	7782-49-2	
Silver, Dissolved	ND	ug/L	50.0	1	06/11/10 00:00	06/16/10 09:07	7440-22-4	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury, Dissolved	ND	ug/L	2.0	1	06/14/10 00:00	06/15/10 10:38	7439-97-6	
9012 Cyanide, Total	Analytical Method: EPA 9012							
Cyanide	ND	mg/L	0.010	1		06/17/10 10:57	57-12-5	

Pace Analytical Services, Inc.
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(317)875-5894

ANALYTICAL RESULTS

Project: Rolls Royce/IN000297.0019
Pace Project No.: 5038203

Sample: MW-206B(060410) **Lab ID: 5038203005** Collected: 06/04/10 14:05 Received: 06/04/10 15:24 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic, Dissolved	ND	ug/L	5.0	1	06/11/10 00:00	06/16/10 09:13	7440-38-2	
Barium, Dissolved	ND	ug/L	100	1	06/11/10 00:00	06/16/10 09:13	7440-39-3	
Cadmium, Dissolved	ND	ug/L	5.0	1	06/11/10 00:00	06/16/10 09:13	7440-43-9	
Chromium, Dissolved	ND	ug/L	10.0	1	06/11/10 00:00	06/16/10 09:13	7440-47-3	
Lead, Dissolved	ND	ug/L	5.0	1	06/11/10 00:00	06/16/10 09:13	7439-92-1	
Selenium, Dissolved	ND	ug/L	10.0	1	06/11/10 00:00	06/16/10 09:13	7782-49-2	
Silver, Dissolved	ND	ug/L	50.0	1	06/11/10 00:00	06/16/10 09:13	7440-22-4	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury, Dissolved	ND	ug/L	2.0	1	06/14/10 00:00	06/15/10 10:39	7439-97-6	
9012 Cyanide, Total	Analytical Method: EPA 9012							
Cyanide	ND	mg/L	0.010	1		06/17/10 10:58	57-12-5	

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: Rolls Royce/IN000297.0019
Pace Project No.: 5038203

Sample: EB-1(060410)-TP **Lab ID: 5038203006** Collected: 06/04/10 11:10 Received: 06/04/10 15:24 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, Dissolved	Analytical Method: EPA 6010 Preparation Method: EPA 3010							
Arsenic, Dissolved	ND	ug/L	5.0	1	06/11/10 00:00	06/16/10 09:18	7440-38-2	
Barium, Dissolved	ND	ug/L	100	1	06/11/10 00:00	06/16/10 09:18	7440-39-3	
Cadmium, Dissolved	ND	ug/L	5.0	1	06/11/10 00:00	06/16/10 09:18	7440-43-9	
Chromium, Dissolved	ND	ug/L	10.0	1	06/11/10 00:00	06/16/10 09:18	7440-47-3	
Lead, Dissolved	ND	ug/L	5.0	1	06/11/10 00:00	06/16/10 09:18	7439-92-1	
Selenium, Dissolved	ND	ug/L	10.0	1	06/11/10 00:00	06/16/10 09:18	7782-49-2	
Silver, Dissolved	ND	ug/L	50.0	1	06/11/10 00:00	06/16/10 09:18	7440-22-4	
7470 Mercury, Dissolved	Analytical Method: EPA 7470 Preparation Method: EPA 7470							
Mercury, Dissolved	ND	ug/L	2.0	1	06/14/10 00:00	06/15/10 10:43	7439-97-6	
9012 Cyanide, Total	Analytical Method: EPA 9012							
Cyanide	ND	mg/L	0.010	1		06/17/10 11:04	57-12-5	

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QUALITY CONTROL DATA

Project: Rolls Royce/IN000297.0019
Pace Project No.: 5038203

QC Batch: MPRP/5827 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET Dissolved
Associated Lab Samples: 5038203001, 5038203002, 5038203003, 5038203004, 5038203005, 5038203006

METHOD BLANK: 443902 Matrix: Water
Associated Lab Samples: 5038203001, 5038203002, 5038203003, 5038203004, 5038203005, 5038203006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic, Dissolved	ug/L	ND	5.0	06/15/10 15:37	
Barium, Dissolved	ug/L	ND	100	06/15/10 15:37	
Cadmium, Dissolved	ug/L	ND	5.0	06/15/10 15:37	
Chromium, Dissolved	ug/L	ND	10.0	06/15/10 15:37	
Lead, Dissolved	ug/L	ND	5.0	06/15/10 15:37	
Selenium, Dissolved	ug/L	ND	10.0	06/15/10 15:37	
Silver, Dissolved	ug/L	ND	50.0	06/15/10 15:37	

LABORATORY CONTROL SAMPLE: 443903

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic, Dissolved	ug/L	1000	984	98	80-120	
Barium, Dissolved	ug/L	1000	997	100	80-120	
Cadmium, Dissolved	ug/L	1000	970	97	80-120	
Chromium, Dissolved	ug/L	1000	1000	100	80-120	
Lead, Dissolved	ug/L	1000	947	95	80-120	
Selenium, Dissolved	ug/L	1000	976	98	80-120	
Silver, Dissolved	ug/L	500	427	85	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 443904 443905

Parameter	Units	5038203005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic, Dissolved	ug/L	ND	1000	1000	1020	1040	102	103	75-125	1	20	
Barium, Dissolved	ug/L	ND	1000	1000	1030	1040	96	97	75-125	.7	20	
Cadmium, Dissolved	ug/L	ND	1000	1000	970	980	97	98	75-125	1	20	
Chromium, Dissolved	ug/L	ND	1000	1000	1000	1010	100	101	75-125	.9	20	
Lead, Dissolved	ug/L	ND	1000	1000	934	944	93	94	75-125	1	20	
Selenium, Dissolved	ug/L	ND	1000	1000	1000	1010	100	100	75-125	.5	20	
Silver, Dissolved	ug/L	ND	500	500	433	436	87	87	75-125	.7	20	

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QUALITY CONTROL DATA

Project: Rolls Royce/IN000297.0019
Pace Project No.: 5038203

QC Batch: MERP/2664 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury Dissolved
Associated Lab Samples: 5038203001, 5038203002, 5038203003, 5038203004, 5038203005, 5038203006

METHOD BLANK: 444759 Matrix: Water
Associated Lab Samples: 5038203001, 5038203002, 5038203003, 5038203004, 5038203005, 5038203006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury, Dissolved	ug/L	ND	2.0	06/15/10 10:31	

LABORATORY CONTROL SAMPLE: 444760

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury, Dissolved	ug/L	5	5.1	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 444761 444762

Parameter	Units	5038203005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury, Dissolved	ug/L	ND	5	5	5.0	5.0	99	99	75-125	.3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 444763 444764

Parameter	Units	5038310003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury, Dissolved	ug/L	ND	5	5	4.9	4.9	98	98	75-125	.6	20	

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QUALITY CONTROL DATA

Project: Rolls Royce/IN000297.0019
Pace Project No.: 5038203

QC Batch: WETA/5124 Analysis Method: EPA 9012
QC Batch Method: EPA 9012 Analysis Description: 9012 Cyanide, Total
Associated Lab Samples: 5038203001, 5038203002, 5038203003, 5038203004, 5038203005, 5038203006

METHOD BLANK: 444887 Matrix: Water
Associated Lab Samples: 5038203001, 5038203002, 5038203003, 5038203004, 5038203005, 5038203006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Cyanide	mg/L	ND	0.010	06/17/10 10:51	

LABORATORY CONTROL SAMPLE: 444888

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	.2	0.21	105	90-110	

MATRIX SPIKE SAMPLE: 444889

Parameter	Units	5038203001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Cyanide	mg/L	ND	.2	0.19	95	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 444890 444891

Parameter	Units	5038203005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cyanide	mg/L	ND	.2	.2	0.20	0.20	97	98	75-125	.5	20	

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QUALIFIERS

Project: Rolls Royce/IN000297.0019
Pace Project No.: 5038203

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is NELAP accredited. Contact your Pace PM for the current list of accredited analytes.

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

1376769

Section A
Required Client Information:

Company:	ARCADIS
Address:	251 E OHIO St. Ste. 800
	INPLS, IN
Email To:	Sarah.Fisher@arcadis-us.com
Phone:	3172316500 Fax: 3172316514
Requested Due Date/TAT:	STD

Section B
Required Project Information:

Report To:	Sarah Fisher
Copy To:	
Purchase Order No.:	
Project Name:	Rolls Royce
Project Number:	~~IN000548.0001.00009~~ 10R IN000297.0019 per Sarah F. 6/4/10

Section C
Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY

NPDES / GROUND WATER / DRINKING WATER / UST / RCRA / OTHER

Site Location STATE: IN

Section D
Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX	CODE
Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

Requested Analysis Filtered (Y/N)

5038203

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	RCRA 8 Metals (Dissolved)	Cyanide Total	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-201B(060410)	WT	G			6/4/10	0935		2										X	X		-001
2	MW-202B(060410)	↓	↓				1100		2										↓	↓		-002
3	MW-203B(060410)	↓	↓				1220		2										↓	↓		-003
4	FD-1(060410)-TP	↓	↓				—		2										↓	↓		Field Duplicate -004
5	MW-206B(060410)	↓	↓				1405		6										↓	↓		MS/MSD -005
6	EB-1(060410)-TP	↓	↓				1110		2										↓	↓		Equipment Blank -006
7																						
8																						
9																						
10																						
11																						
12																						

TP 6/4/10

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
AN/IL per Heath 6/7/10 (BB)	T. [signature] / ARCADIS	6/4/10	1524	[signature]	6/4/10	1524	3.1	Y	N	Y

WI Client del. ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Tim Parker

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 6/4/10

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Sample Condition Upon Receipt

Pace Analytical   Client Name: ARCADIS   Project # 5036203

Courier: ☐ Fed Ex ☐ UPS ☐ USPS ☑ Client ☐ Commercial ☐ Pace Other

Tracking #:

Custody Seal on Cooler/Box Present: ☐ yes ☑ no   Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☐ None ☑ Other Ice

Thermometer Used 123456 (B)   Type of Ice: (Wet) Blue None   ☐ Samples on ice, cooling process has begun

Cooler Temperature 3.1°C   Ice Visible in Sample Containers: ☐ yes ☑ no

Temp should be above freezing to 6°C

Date and Initials of person examining contents: 6/5/10 [initials]

		Comments:
Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Short Hold Time Analysis (<72hr):	☐Yes ☐No ☑N/A	5.
Rush Turn Around Time Requested:	☐Yes ☐No ☑N/A	6.
Containers Intact:	☑Yes ☐No ☐N/A	7.
Sample Labels match COC: -Includes date/time/ID/Analysis	☑Yes ☐No ☐N/A	8.
All containers needing preservation have been pH checked? exceptions: VOA, coliform, TOC, O&G, WI-DRO (water)	☑Yes ☐No ☐N/A	9.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
Headspace in VOA Vials (>6mm):	☐Yes ☐No ☑N/A	10.
Trip Blank Present:	☐Yes ☐No ☑N/A	11.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Project Manager Review		
Samples Arrived within Hold Time:	☑Yes ☐No ☐N/A	12.
Sufficient Volume:	☑Yes ☐No ☐N/A	13.
Correct Containers Used:	☑Yes ☐No ☐N/A	14.

Client Notification/ Resolution: Field Data Required? Y / N

Person Contacted: Sarah Fisler   Date/Time: 6/4/10

Comments/ Resolution:

Not CRA/GM per Sarah Fisler

LVLTV per Heather 6/7/10 [initials]

Project Manager Review: Kenneth Hunt   **Date:** 6/4/10

Form F-IN-Q290-rev.0, 02Mar2010

Sample Container Count

CLIENT: ARCADIS

COC PAGE 1 of 1

COC ID# 13760769

Project # 60358003

Sample Line Item	DG9H	AG1U	WGFU	R 4/6	BP2N	BP2U	BP2S	BP3N	BP3U	BP3S	AG3S	AG1H	BP3C			Comments
1								1					1			
2								1					1			
3								1					1			
4								1					1			
5								3					3			
6								1					1			
7																
8																
9																
10																
11																
12																

Container Codes

DG9H	40mL HCL amber voa vial	AF	Air Filter	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved amber vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	BP3A	250mL NaOh, Asc Acid plastic	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved clear vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag

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ICP Metals 6010B

Project Number 5038203

Initials/ Date Compiled LLB 6-19-10

Section 1: Prep and Analytical Information

** Sample Preparation Logs*
** Sample Analysis Logs*
** QC Summary Sheets*

Metals Digestion Log

PASI Indianapolis Laboratory

ICP Spike Sol. #: 22125 Analyst: LLB Hydrochloric: 4109100 Page Number: 10516

Furnace Spike Sol.#: 0 Nitric: 1110020 Hydrogen Peroxide: Friday, June 11, 2010

Cup Lot #: A905LS2695 Filter Lot #: HotBlock temp: 95/4

Analyst	Sample ID	Client	Sample Type	QC Batch	Initial Wt./Vol (g or ml)	Final Vol. (ml)	Project No.	Comments	Method
LLB	443902	In-house QC Account	BLANK	5827	50	50			3010 ICP
LLB	443903	In-house QC Account	LCS	5827	50	50			3010 ICP
LLB	443904	In-house QC Account	MS	5827	50	50			3010 ICP
LLB	443905	In-house QC Account	MSD	5827	50	50			3010 ICP
LLB	5038193001	BP-Delta-Hull-Indiana	PS	5827	50	50	5038193	Pb	3010 ICP
LLB	5038193002	BP-Delta-Hull-Indiana	PS	5827	50	50	5038193		3010 ICP
LLB	5038193003	BP-Delta-Hull-Indiana	PS	5827	50	50	5038193		3010 ICP
LLB	5038193004	BP-Delta-Hull-Indiana	PS	5827	50	50	5038193		3010 ICP
LLB	5038193005	BP-Delta-Hull-Indiana	PS	5827	50	50	5038193		3010 ICP
LLB	5038197001	QEPI Construction Man	PS	5827	50	50	5038197		3010 ICP
LLB	5038197002	QEPI Construction Man	PS	5827	50	50	5038197		3010 ICP
LLB	5038197003	QEPI Construction Man	PS	5827	50	50	5038197		3010 ICP
LLB	5038197004	QEPI Construction Man	PS	5827	50	50	5038197	↓	3010 ICP
LLB	5038203001	Arcadis U.S., Inc.	PS	5827	50	50	5038203	P-UPA (AS 6)	3010 ICP
LLB	5038203002	Arcadis U.S., Inc.	PS	5827	50	50	5038203		3010 ICP
LLB	5038203003	Arcadis U.S., Inc.	PS	5827	50	50	5038203		3010 ICP
LLB	5038203004	Arcadis U.S., Inc.	PS	5827	50	50	5038203		3010 ICP
LLB	5038203005	Arcadis U.S., Inc.	OQS	5827	50	50	5038203		3010 ICP
LLB	5038203006	Arcadis U.S., Inc.	PS	5827	50	50	5038203	↓	3010 ICP
LLB	5038281001	HC Nutting Company	PS	5827	50	50	5038281	Fe	3010 ICP
LLB	5038281002	HC Nutting Company	PS	5827	50	50	5038281	↓	3010 ICP

AB# 5219

ICP Instrument Run Log

Nitric Lot#: 3066

HCL Lot#: 3063

Page Number 2106

50TRACE

Tuesday, June 15, 2010

ICV Standard #: 22146 CalStdID1: 22127 CalStdID2: 22128 CalStdID3: 22129 CalStdID4: 22130 CalStdID5: 22131

CalStdID6: 0 CalStdID7: 22133 ICSA: 22147 ICSAB: 22148 CRDL: 22144 Blank: 22141

SampleID	SampleType	Client	Comments	RunBatch	QCBatch	ReRun	Date\Time	Project#
SAMPLE ID:	SAMPLE TYP	CLIENT		BATCH:		No		PROJECT
50ICP1	PACE2006	METHOD:				No		
						No		
blank						No	6/15/2010 7:22:00 AM	
ag 2						No	6/15/2010 7:27:00 AM	
mixstd 3						No	6/15/2010 7:32:00 AM	
mixstd 5						No	6/15/2010 7:37:00 AM	
mixstd 2						No	6/15/2010 7:42:00 AM	
mixstd 1						No	6/15/2010 7:47:00 AM	
mixstd 4						No	6/15/2010 7:52:00 AM	
icvccv						No	6/15/2010 7:57:00 AM	
icbccb						No	6/15/2010 8:03:00 AM	
crdl						No	6/15/2010 8:08:00 AM	
icsa						No	6/15/2010 8:14:00 AM	
icsab						No	6/15/2010 8:20:00 AM	
icsa						No	6/15/2010 8:27:00 AM	
444717	BLANK	In-house QC Accou		5216		No	6/15/2010 8:34:00 AM	
444718	LCS	In-house QC Accou		5216		No	6/15/2010 8:39:00 AM	
444719	LCSD	In-house QC Accou		5216		No	6/15/2010 8:45:00 AM	
5038088007	PS	August Mack-IN		5216		No	6/15/2010 8:51:00 AM	5038088
444720	MS	In-house QC Accou		5216		No	6/15/2010 8:56:00 AM	
5038088008	PS	August Mack-IN		5216		No	6/15/2010 9:02:00 AM	5038088
5038088009	PS	August Mack-IN		5216		No	6/15/2010 9:08:00 AM	5038088
5038088010	PS	August Mack-IN		5216		No	6/15/2010 9:13:00 AM	5038088
443334	BLANK	In-house QC Accou		5217		No	6/15/2010 9:19:00 AM	
443335	LCS	In-house QC Accou		5217		No	6/15/2010 9:25:00 AM	
icvccv						No	6/15/2010 9:30:00 AM	

ICP Instrument Run Log

Nitric Lot#: 3066

HCL Lot#: 3063

Page Number 2106

50TRACE

Tuesday, June 15, 2010

ICV Standard #: 22146 CalStdID1: 22127 CalStdID2: 22128 CalStdID3: 22129 CalStdID4: 22130 CalStdID5: 22131

CalStdID6: 0 CalStdID7: 22133 ICSA: 22147 ICSAB: 22148 CRDL: 22144 Blank: 22141

SampleID	SampleType	Client	Comments	RunBatch	QCBatch	ReRun	Date\Time	Project#
5038202020	PS	Stantec Consulting		5217		No	6/15/2010 12:10:00 PM	5038202
5038202021	PS	Stantec Consulting		5217		No	6/15/2010 12:15:00 PM	5038202
5038202023	PS	Stantec Consulting		5217		No	6/15/2010 12:21:00 PM	5038202
443338	BLANK	In-house QC Accou		5218		No	6/15/2010 12:27:00 PM	
443339	LCS	In-house QC Accou		5218		No	6/15/2010 12:32:00 PM	
5038202024	PS	Stantec Consulting		5218		No	6/15/2010 12:38:00 PM	5038202
5038202025	PS	Stantec Consulting		5218		No	6/15/2010 12:44:00 PM	5038202
5038202026	PS	Stantec Consulting		5218		No	6/15/2010 12:49:00 PM	5038202
5038202027	PS	Stantec Consulting		5218		No	6/15/2010 12:55:00 PM	5038202
icvccv						No	6/15/2010 1:01:00 PM	
icbccb						No	6/15/2010 1:07:00 PM	
crdl						No	6/15/2010 1:12:00 PM	
5038202028	PS	Stantec Consulting		5218		No	6/15/2010 1:18:00 PM	5038202
5038202029	PS	Stantec Consulting		5218		No	6/15/2010 1:24:00 PM	5038202
5038202030	PS	Stantec Consulting		5218		No	6/15/2010 1:29:00 PM	5038202
5038202031	PS	Stantec Consulting		5218		No	6/15/2010 1:35:00 PM	5038202
5038202032	PS	Stantec Consulting		5218		No	6/15/2010 1:41:00 PM	5038202
5038261007	PS	Stantec Consulting		5218		No	6/15/2010 1:46:00 PM	5038261
443340	MS	In-house QC Accou		5218		No	6/15/2010 1:52:00 PM	
443341	MSD	In-house QC Accou		5218		No	6/15/2010 1:58:00 PM	
5038261007 pds						No	6/15/2010 2:03:00 PM	
5038261007 5x						No	6/15/2010 2:09:00 PM	
icvccv						No	6/15/2010 2:15:00 PM	
icbccb						No	6/15/2010 2:20:00 PM	
icsa						No	6/15/2010 2:26:00 PM	
icsab						No	6/15/2010 2:32:00 PM	
5038261008	PS	Stantec Consulting		5218		No	6/15/2010 2:57:00 PM	5038261

ICP Instrument Run Log

Nitric Lot#: 3066

Page Number 2106

50TRACE

HCL Lot#: 3063

Tuesday, June 15, 2010

ICV Standard #: 22146 CalStdID1: 22127 CalStdID2: 22128 CalStdID3: 22129 CalStdID4: 22130 CalStdID5: 22131

CalStdID6: 0 CalStdID7: 22133 ICSA: 22147 ICSAB: 22148 CRDL: 22144 Blank: 22141

SampleID	SampleType	Client	Comments	RunBatch	QCBatch	ReRun	Date\Time	Project#
5038261009	PS	Stantec Consulting		5218		No	6/15/2010 3:03:00 PM	5038261
5038261010	PS	Stantec Consulting		5218		No	6/15/2010 3:08:00 PM	5038261
5038261011	PS	Stantec Consulting		5218		No	6/15/2010 3:14:00 PM	5038261
5038261012	PS	Stantec Consulting		5218		No	6/15/2010 3:20:00 PM	5038261
5038354001	PS	TesTech Inc.		5218		No	6/15/2010 3:25:00 PM	5038354
5038354002	PS	TesTech Inc.		5218		No	6/15/2010 3:31:00 PM	5038354
443902	BLANK	In-house QC Accou		5219		No	6/15/2010 3:37:00 PM	
443903	LCS	In-house QC Accou		5219		No	6/15/2010 3:42:00 PM	
5038203001	PS	Arcadis U.S._ Inc.		5219		No	6/15/2010 3:48:00 PM	5038203
icvccv						No	6/15/2010 3:54:00 PM	
icbccb						No	6/15/2010 3:59:00 PM	
crdl						No	6/15/2010 4:05:00 PM	
5038203002 r	PS	Arcadis U.S._ Inc.		5219		No	6/15/2010 4:11:00 PM	5038203
5038203003 r	PS	Arcadis U.S._ Inc.		5219		No	6/15/2010 4:16:00 PM	5038203
5038203004 r	PS	Arcadis U.S._ Inc.		5219		No	6/15/2010 4:22:00 PM	5038203
5038203005 r	OQS	Arcadis U.S._ Inc.		5219		No	6/15/2010 4:28:00 PM	5038203
443904	MS	In-house QC Accou		5219		No	6/15/2010 4:33:00 PM	
443905	MSD	In-house QC Accou		5219		No	6/15/2010 4:39:00 PM	
5038203006 r	PS	Arcadis U.S._ Inc.		5219		No	6/15/2010 4:45:00 PM	5038203
5038193001	PS	BP-Delta-Hull-India		5219		No	6/15/2010 4:50:00 PM	5038193
5038193002	PS	BP-Delta-Hull-India		5219		No	6/15/2010 4:56:00 PM	5038193
5038193003	PS	BP-Delta-Hull-India		5219		No	6/15/2010 5:02:00 PM	5038193
icvccv						No	6/15/2010 5:07:00 PM	
icbccb						No	6/15/2010 5:13:00 PM	
5038193004	PS	BP-Delta-Hull-India		5219		No	6/15/2010 5:19:00 PM	5038193
5038193005	PS	BP-Delta-Hull-India		5219		No	6/15/2010 5:24:00 PM	5038193
5038197001	PS	QEPI Construction		5219		No	6/15/2010 5:30:00 PM	5038197

fm Grace

ICP Instrument Run Log

Nitric Lot#: 3066

HCL Lot#: 3063

Page Number 2107

50TRACE

Wednesday, June 16, 2010

ICV Standard #: 22146 CalStdID1: 22152 CalStdID2: 22153 CalStdID3: 22154 CalStdID4: 22155 CalStdID5: 22156

CalStdID6: 0 CalStdID7: 22158 ICSA: 22147 ICSAB: 22148 CRDL: 22144 Blank: 22159

SampleID	SampleType	Client	Comments	RunBatch	QCBatch	ReRun	Date\Time	Project#
SAMPLE ID:	SAMPLE TYP	CLIENT		BATCH:		No		PROJECT
50ICP1	PACE2006	METHOD:				No		
						No		
blank						No	6/16/2010 7:31:00 AM	
ag 2						No	6/16/2010 7:37:00 AM	
mixstd 3						No	6/16/2010 7:41:00 AM	
mixstd 5						No	6/16/2010 7:47:00 AM	
mixstd 2						No	6/16/2010 7:52:00 AM	
mixstd 1						No	6/16/2010 7:56:00 AM	
mixstd 4						No	6/16/2010 8:03:00 AM	
icvccv						No	6/16/2010 8:08:00 AM	
icbccb						No	6/16/2010 8:14:00 AM	
crdl						No	6/16/2010 8:19:00 AM	
icsa						No	6/16/2010 8:25:00 AM	
icsab						No	6/16/2010 8:34:00 AM	
10130925001 5x	PS	Pace Minnesota		5224		No	6/16/2010 8:44:00 AM	
5038471001	PS	Arcadis U.S._ Inc.		5222		No	6/16/2010 8:50:00 AM	
5038203002	PS	Arcadis U.S._ Inc.		5219		No	6/16/2010 8:56:00 AM	
5038203003	PS	Arcadis U.S._ Inc.		5219		No	6/16/2010 9:01:00 AM	
5038203004	PS	Arcadis U.S._ Inc.		5219		No	6/16/2010 9:07:00 AM	
5038203005	PS	Arcadis U.S._ Inc.		5219		No	6/16/2010 9:13:00 AM	
5038203006	PS	Arcadis U.S._ Inc.		5219		No	6/16/2010 9:18:00 AM	
icvccv						No	6/16/2010 9:24:00 AM	
icbccb						No	6/16/2010 9:30:00 AM	
443907	BLANK	In-house QC Accou		5226		No	6/16/2010 9:36:00 AM	
443908	LCS	In-house QC Accou		5226		No	6/16/2010 9:42:00 AM	
5038334001	OQS	August Mack_ Ohio		5226		No	6/16/2010 9:47:00 AM	5038334

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ICP Metals 6010B

Section 2: Initial Calibration Data

** Initial Calibration Summary Table*
** Initial Calibration Standards and Blanks*
** CRDL Standards*

Initial Calibrations included:
(Instrument name and calibration date)

ICAL 1: 501CP1 6-15-10

ICAL 2: 501CP1 6-16-10

ICAL 3: _____

ICAL 4: _____

Method: PACE2006 Standard: blank
Run Time: 06/15/10 07:22:02

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Avge	.00016	.00682	.00087	.00025	.00012	.00051	.00065
SDev	.00003	.00220	.00021	.00010	.00002	.00014	.00066
%RSD	19.960	32.183	24.118	38.339	13.103	28.046	101.60
#1	.00014	.00527	.00102	.00018	.00014	.00041	.00018
#2	.00018	.00838	.00072	.00032	.00011	.00061	.00111

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Avge	.00092	.00068	.00424	.00024	-.00065	.00034	.00049
SDev	.00076	.00000	.00023	.00024	.00017	.00016	.00014
%RSD	82.224	.24853	5.5420	100.89	27.052	47.361	29.362
#1	.00145	.00068	.00441	.00007	-.00052	.00045	.00039
#2	.00038	.00068	.00407	.00041	-.00077	.00023	.00059

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Avge	.00032	.00179	.00777	.01670	.00256	.00178	.00016
SDev	.00067	.00241	.00383	.00743	.00015	.00140	.00241
%RSD	211.82	134.29	49.259	44.486	6.0095	78.539	1544.1
#1	.00080	.00350	.00507	.01145	.00245	.00277	-.00154
#2	-.00016	.00009	.01048	.02196	.00267	.00079	.00186

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Avge	-.00322	.00865	.00020	.01290	.00023	.00173	-.00352
SDev	.00176	.00026	.00010	.00154	.00003	.00002	.00110
%RSD	54.564	3.0287	47.361	11.928	13.896	1.1728	31.258
#1	-.00198	.00884	.00027	.01399	.00020	.00175	-.00429
#2	-.00446	.00847	.00014	.01182	.00025	.00172	-.00274

Elem	Al3082
Avge	-.00833
SDev	.00004
%RSD	.44094
#1	-.00836
#2	-.00831

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	44098	--	--	--	--	--	--
SDev	109.6016	--	--	--	--	--	--
%RSD	.2485381	--	--	--	--	--	--
#1	44021	--	--	--	--	--	--
#2	44176	--	--	--	--	--	--

Method: PACE2006 Standard: ag 2
Run Time: 06/15/10 07:27:42

Elem	Ag3280
Avge	.78497
SDev	.00028
%RSD	.03577
#1	.78477
#2	.78516

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42638	--	--	--	--	--	--
SDev	137.8858	--	--	--	--	--	--
%RSD	.3233910	--	--	--	--	--	--
#1	42540	--	--	--	--	--	--
#2	42735	--	--	--	--	--	--

Method: PACE2006 Standard: mixstd 3
Run Time: 06/15/10 07:32:19

Elem	As1890	Mo2020	Si2881
Avge	12.256	.90728	.33592
SDev	.110	.00721	.00265
%RSD	.90000	.79503	.78952
#1	12.334	.91238	.33779
#2	12.178	.90218	.33404

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	43093	--	--	--	--	--	--
SDev	445.4773	--	--	--	--	--	--
%RSD	1.033758	--	--	--	--	--	--
#1	42778	--	--	--	--	--	--
#2	43408	--	--	--	--	--	--

Method: PACE2006 Standard: mixstd 5
Run Time: 06/15/10 07:37:27

Elem	B_2496	Mg2790	Sb2068	Tl1908
Avge	.25429	1.8469	1.3705	3.2481
SDev	.00023	.0090	.0088	.0084
%RSD	.09147	.48560	.64185	.25813
#1	.25446	1.8532	1.3767	3.2540
#2	.25413	1.8405	1.3643	3.2422

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	43242	--	--	--	--	--	--
SDev	284.2569	--	--	--	--	--	--
%RSD	.6573631	--	--	--	--	--	--
#1	43041	--	--	--	--	--	--
#2	43443	--	--	--	--	--	--

Method: PACE2006 Standard: mixstd 2
Run Time: 06/15/10 07:42:37

Elem	Ba4934	Co2286	Cu3247	Fe2714	V_2924
Avge	.33401	.99962	.94638	2.8989	.20782
SDev	.00106	.00447	.00333	.0116	.00102
%RSD	.31770	.44764	.35187	.39845	.49217
#1	.33476	1.0028	.94873	2.9071	.20855
#2	.33326	.99645	.94402	2.8907	.20710

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42638	--	--	--	--	--	--
SDev	332.3402	--	--	--	--	--	--
%RSD	.7794460	--	--	--	--	--	--
#1	42403	--	--	--	--	--	--
#2	42873	--	--	--	--	--	--

Method: PACE2006 Standard: mixstd 1
Run Time: 06/15/10 07:47:15

Elem	Be3130	Cd2265	Mn2576	2203/1	2203/2	1960/1	1960/2
Avge	3.3075	18.996	2.1736	47.403	39.451	2.2234	2.2208
SDev	.0068	.002	.0007	.183	.104	.0103	.0024
%RSD	.20691	.00981	.03116	.38589	.26434	.46237	.10954
#1	3.3027	18.997	2.1741	47.532	39.525	2.2306	2.2225
#2	3.3124	18.995	2.1731	47.273	39.377	2.2161	2.2191

Elem	Zn2062
Avge	1.7547
SDev	.0034
%RSD	.19230
#1	1.7570
#2	1.7523

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42729	--	--	--	--	--	--
SDev	60.81118	--	--	--	--	--	--
%RSD	.1423183	--	--	--	--	--	--
#1	42686	--	--	--	--	--	--
#2	42772	--	--	--	--	--	--

Method: PACE2006 Standard: mixstd 4
Run Time: 06/15/10 07:52:24

Elem	Ca3158	Cr2677	K_7664	Na3302	Ni2316	Al3082
Avge	3.4081	.47952	.25530	.07663	2.2327	.86773
SDev	.0022	.00044	.00003	.00057	.0184	.00136
%RSD	.06495	.09159	.01123	.74647	.82404	.15657
#1	3.4065	.47921	.25532	.07623	2.2457	.86869
#2	3.4096	.47983	.25528	.07704	2.2197	.86677

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42500	--	--	--	--	--	--
SDev	3.535534	--	--	--	--	--	--
%RSD	.0083188	--	--	--	--	--	--
#1	42503	--	--	--	--	--	--
#2	42498	--	--	--	--	--	--

Standardization Report 06/15/10 07:57:30 AM page 1

Method: PACE2006 Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag3280	328.068	ag 2	blank	2548.40	-.404421	06/15/10 07:52:24
As1890	189.042	mixstd 3	blank	816.409	-5.57028	06/15/10 07:52:24
B_2496	249.678	mixstd 5	blank	7892.12	-6.89225	06/15/10 07:52:24
Ba4934	493.409	mixstd 2	blank	2996.13	-.747002	06/15/10 07:52:24
Be3130	313.042	mixstd 1	blank	302.351	-.037716	06/15/10 07:52:24
Ca3158	315.887	mixstd 4	blank	14673.2	-7.48398	06/15/10 07:52:24
Cd2265	226.502	mixstd 1	blank	157.934	-.101941	06/15/10 07:52:24
Co2286	228.616	mixstd 2	blank	1003.75	-.922781	06/15/10 07:52:24
Cr2677	267.716	mixstd 4	blank	2088.43	-1.42075	06/15/10 07:52:24
Cu3247	324.753	mixstd 2	blank	1042.43	-4.42075	06/15/10 07:52:24
Fe2714	271.441	mixstd 2	blank	34498.5	-8.20392	06/15/10 07:52:24
K_7664	766.491	mixstd 4	blank	78141.1	50.4841	06/15/10 07:52:24
Mg2790	279.078	mixstd 5	blank	10831.0	-3.68631	06/15/10 07:52:24
Mn2576	257.610	mixstd 1	blank	920.346	-.448546	06/15/10 07:52:24
Mo2020	202.030	mixstd 3	blank	2205.15	-.701920	06/15/10 07:52:24
Na3302	330.232	mixstd 4	blank	133210.	-239.037	06/15/10 07:52:24
Ni2316	231.604	mixstd 4	blank	449.468	-3.49384	06/15/10 07:52:24
2203/1	220.351	mixstd 1	blank	211.083	-3.52580	06/15/10 07:52:24
2203/2	220.352	mixstd 1	blank	253.495	-.649519	06/15/10 07:52:24
Sb2068	206.838	mixstd 5	blank	2922.46	-5.20738	06/15/10 07:52:24
1960/1	196.021	mixstd 1	blank	1799.53	-.280271	06/15/10 07:52:24
1960/2	196.022	mixstd 1	blank	1798.06	5.78595	06/15/10 07:52:24
Si2881	288.158	mixstd 3	blank	30520.3	-264.043	06/15/10 07:52:24
Sn1899	189.989	mixstd 6	blank	8780.76	-1.79311	06/15/10 07:52:24
Ti3372	337.280	mixstd 6	blank	620.424	-8.00648	06/15/10 07:52:24
V_2924	292.402	mixstd 2	blank	4829.37	-1.09494	06/15/10 07:52:24
Zn2062	206.200	mixstd 1	blank	1711.43	-2.96895	06/15/10 07:52:24
Tl1908	190.864	mixstd 5	blank	1230.16	4.32553	06/15/10 07:52:24
Al3082	308.215	mixstd 4	blank	11406.5	95.0580	06/15/10 07:52:24
Pb2203	220.353	STD4	STD1-Blank	1.00000	.000000	*NOT STANDARDIZED
Se1960	196.026	STD4	STD1-Blank	1.00000	.000000	*NOT STANDARDIZED

Method: PACE2006 Sample Name: icvccv Operator:
Run Time: 06/15/10 07:57:34
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	479.86	1027.3	1001.8	1024.2	994.17	10393.	994.25
SDev	.78	5.0	6.5	1.5	3.91	15.	.79
%RSD	.16227	.48206	.64946	.14406	.39340	.14074	.07947
#1	479.31	1030.8	997.19	1023.2	996.93	10383.	993.69
#2	480.41	1023.8	1006.4	1025.3	991.40	10404.	994.81
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.00	1000.0	1000.0	1000.0	1000.0	10000.	1000.0
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	999.73	1017.7	975.54	10282.	10287.	10222.	1001.9
SDev	1.96	1.3	2.70	8.	13.	7.	1.6
%RSD	.19602	.13236	.27652	.07339	.12573	.06805	.15737
#1	998.35	1016.7	973.63	10287.	10296.	10217.	1000.8
#2	1001.1	1018.6	977.44	10276.	10278.	10227.	1003.0
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1000.0	1000.0	1000.0	10000.	10000.	10000.	1000.0
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1016.2	10501.	1017.1	991.92	981.90	1071.6	992.71
SDev	1.3	221.	.3	.58	2.91	5.7	4.17
%RSD	.12916	2.1038	.02874	.05813	.29632	.53039	.42008
#1	1015.3	10345.	1016.9	991.51	983.96	1075.6	995.66
#2	1017.2	10658.	1017.3	992.32	979.84	1067.6	989.76
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	1000.0	10000.	1000.0			1000.0	
Range	10.000	10.000	10.000			10.000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1003.6	5364.6	Q1343.5	Q1382.5	1035.1	991.92	991.83
SDev	2.9	10.8	6.9	1.7	2.7	3.49	4.22
%RSD	.29255	.20045	.51425	.12448	.26151	.35158	.42507
#1	1005.7	5356.9	Q1348.4	Q1383.8	1033.2	989.45	994.81
#2	1001.6	5372.2	Q1338.6	Q1381.3	1037.1	994.38	988.85
Errors	NOCHECK	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass
Value		5000.0	1000.0	1000.0	1000.0	1000.0	1000.0
Range		10.000	10.000	10.000	10.000	10.000	10.000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	10141.	985.2	1000.
SDev	4.	1.7	3.
%RSD	.04211	.1775	.3347
#1	10144.	986.5	1002.
#2	10138.	984.0	997.6
Errors	QC Pass	QC Pass	QC Pass
Value	10000.	1000.	1000.
Range	10.000	10.00	10.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42774	--	--	--	--	--	--
SDev	178.1909	--	--	--	--	--	--
%RSD	.4165870	--	--	--	--	--	--
#1	42648	--	--	--	--	--	--
#2	42900	--	--	--	--	--	--

Method: PACE2006 Sample Name: icbccb Operator:
Run Time: 06/15/10 08:03:15
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.76122	-5.3160	4.2783	-.29380	.03290	8.5807	-.06285
SDev	1.00737	1.6795	2.3788	.24593	.00010	.4605	.06790
%RSD	132.33	31.593	55.600	83.705	.28759	5.3662	108.03
#1	-1.4735	-6.5036	5.9604	-.46770	.03296	8.2551	-.01484
#2	-.04891	-4.1284	2.5963	-.11991	.03283	8.9063	-.11086
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	5.0000	10.000	50.000	50.000	50.000	200.00	1.0000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.63262	3.1012	-.61879	28.737	-11.369	4.6809	.82591
SDev	.18117	.0067	.42340	1.077	2.665	1.4830	.01394
%RSD	28.638	.21500	68.423	3.7468	23.443	31.683	1.6884
#1	-.76073	3.1059	-.91818	27.976	-13.254	3.6322	.81605
#2	-.50451	3.0964	-.31941	29.499	-9.4847	5.7295	.83577
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	10.000	5.0000	10.000	50.000	250.00	200.00	5.0000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.8549	89.582	2.7305	.24620	.60502	-1.2237	-9.2229
SDev	.7797	140.05	.9978	.07128	1.0892	.6311	3.8673
%RSD	42.033	156.33	36.543	28.954	180.02	51.572	41.932
#1	1.3036	-9.4468	2.0249	.19579	1.3752	-.77743	-6.4883
#2	2.4062	188.61	3.4361	.29660	-.16513	-1.6699	-11.957
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	.00000	.00000	.00000			.00000	
Range	20.000	1000.0	10.000			6.0000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3.9078	63.875	-3.3255	.03152	-.64503	1.2697	-.81572
SDev	.5003	1.022	.1438	.06311	.15929	.4159	2.09498
%RSD	12.803	1.5998	4.3238	200.23	24.696	32.758	256.83
#1	4.2616	63.152	-3.2238	.07614	-.53239	.97562	.66566
#2	3.5540	64.597	-3.4272	-.01311	-.75767	1.5639	-2.2971
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.00000	.00000	.00000	.00000	.00000	.00000
Range		200.00	20.000	20.000	10.000	10.000	20.000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	-2.2544	.4857	-.4645
SDev	5.5847	.7027	1.6215
%RSD	247.73	144.7	349.1
#1	-6.2034	.9826	.6821
#2	1.6946	-.0112	-1.611
Errors	QC Pass	QC Pass	QC Pass
Value	.00000	.0000	.0000
Range	50.000	5.000	10.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42954	--	--	--	--	--	--
SDev	64.34672	--	--	--	--	--	--
%RSD	.1498020	--	--	--	--	--	--
#1	42909	--	--	--	--	--	--
#2	43000	--	--	--	--	--	--

Method: PACE2006 Sample Name: crdl Operator:
Run Time: 06/15/10 08:08:56
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	8.6453	Q4.7920	148.59	3.5995	9.6917	538.77	.98326
SDev	1.3708	1.1286	2.35	.1631	.0491	.99	.02198
%RSD	15.856	23.551	1.5793	4.5302	.50611	.18434	2.2349
#1	9.6146	Q3.9940	150.25	3.7148	9.7263	539.47	.99880
#2	7.6760	5.5901	146.93	3.4842	9.6570	538.07	.96772
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.000	10.000	150.00	3.0000	10.000	500.00	1.0000
Range	50.000	50.000	20.000	50.000	20.000	20.000	50.000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	18.947	18.254	9.2684	106.96	4916.5	498.65	9.6913
SDev	.324	.340	.6693	3.26	18.5	.55	.0980
%RSD	1.7089	1.8599	7.2208	3.0458	.37627	.10980	1.0117
#1	18.718	18.014	8.7951	109.26	4903.4	498.26	9.6220
#2	19.176	18.494	9.7416	104.66	4929.6	499.04	9.7607
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	20.000	10.000	100.00	5000.0	500.00	10.000
Range	20.000	20.000	50.000	50.000	20.000	20.000	20.000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	29.952	1936.9	37.026	7.9842	3.9343	10.031	12.998
SDev	.045	64.4	.528	1.2739	1.8555	7.572	6.309
%RSD	.15044	3.3226	1.4253	15.955	47.163	75.483	48.536
#1	29.984	1891.4	37.399	7.0834	5.2464	Q4.6771	17.458
#2	29.920	1982.4	36.653	8.8850	2.6222	Q15.385	8.5368
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	30.000	2000.0	40.000			10.000	
Range	20.000	50.000	20.000			50.000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	7.9536	65.235	Q89.049	27.388	28.149	40.424	20.142
SDev	1.7796	1.175	2.466	.199	.212	.492	1.068
%RSD	22.375	1.8006	2.7693	.72731	.75413	1.2183	5.3006
#1	9.2120	66.066	Q90.793	27.248	27.999	40.772	20.897
#2	6.6953	64.405	Q87.305	27.529	28.299	40.076	19.387
Errors	NOCHECK	NOCHECK	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value			70.000	20.000	30.000	40.000	20.000
Range			20.000	50.000	20.000	20.000	50.000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	210.23	5.283	9.633
SDev	8.94	.813	3.288
%RSD	4.2542	15.40	34.13
#1	203.90	5.858	11.96
#2	216.55	4.708	7.309
Errors	QC Pass	QC Pass	QC Pass
Value	200.00	6.000	10.00
Range	50.000	50.00	50.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	43085	--	--	--	--	--	--
SDev	154.1493	--	--	--	--	--	--
%RSD	.3577794	--	--	--	--	--	--
#1	42976	--	--	--	--	--	--
#2	43194	--	--	--	--	--	--

Method: PACE2006 Sample Name: icsa Operator: Nnn for 6-15-10
Run Time: 06/15/10 08:14:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.78977	-17.652	3.0564	1.3839	-1.4992	475710.	-.45842
SDev	.81384	.547	2.3685	.0289	.0515	3981.	.25912
%RSD	103.05	3.1012	77.491	2.0897	3.4345	.83676	56.524
#1	-1.3652	-18.039	1.3817	1.3635	-1.5356	478530.	-.64165
#2	-.21430	-17.265	4.7312	1.4044	-1.4628	472900.	-.27520
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	500000.	.00000
Range	10.000	20.000	100.00	20.000	6.0000	100000.	2.0000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-4.2604	-4.0919	-12.381	186930.	-7.8595	484670.	-5.9652
SDev	.1859	.0654	.119	1720.	18.5741	3970.	.0967
%RSD	4.3624	1.5987	.95927	.92037	236.33	.81904	1.6210
#1	-4.1290	-4.1382	-12.465	188150.	-20.993	487470.	-6.0336
#2	-4.3918	-4.0457	-12.297	185710.	5.2743	481860.	-5.8968
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	200000.	.00000	500000.	.00000
Range	20.000	10.000	20.000	40000.	500.00	100000.	10.000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.4281	-145.74	.12187	153.51	-75.938	-6.0321	-5.2392
SDev	.3195	117.89	1.3125	1.28	.971	2.8211	.3571
%RSD	22.369	80.890	1077.0	.83644	1.2784	46.768	6.8169
#1	1.2022	-229.09	-.80621	152.60	-76.625	-4.0373	-4.9867
#2	1.6540	-62.378	1.0499	154.42	-75.252	-8.0270	-5.4917
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	.00000	.00000	.00000			.00000	
Range	40.000	2000.0	20.000			12.000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	31.319	73.939	10.128	2.6823	-1.1946	-3.4096	11.198
SDev	8.992	2.638	1.776	.5258	.0083	.8863	3.022
%RSD	28.711	3.5678	17.535	19.603	.69489	25.994	26.988
#1	37.678	72.074	8.8719	2.3105	-1.1887	-4.0363	13.335
#2	24.961	75.805	11.383	3.0541	-1.2004	-2.7829	9.0614
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.00000	.00000	.00000	.00000	.00000	.00000
Range		400.00	20.000	20.000	20.000	20.000	100.00

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	468540.	.4678	19.15
SDev	4648.	1.075	6.12
%RSD	.99204	229.8	31.95
#1	471830.	-.2924	Q23.47
#2	465260.	1.228	14.82
Errors	QC Pass	QC Pass	QC Pass
Value	500000.	.0000	.0000
Range	100000.	10.00	20.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40068	--	--	--	--	--	--
SDev	450.4270	--	--	--	--	--	--
%RSD	1.124142	--	--	--	--	--	--
#1	39750	--	--	--	--	--	--
#2	40387	--	--	--	--	--	--

Method: PACE2006 Sample Name: icsab Operator:
Run Time: 06/15/10 08:20:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	243.37	488.90	504.38	501.79	480.54	478500.	462.40
SDev	1.70	3.10	.40	.46	.63	821.	.05
%RSD	.69860	.63476	.07952	.09215	.13145	.17148	.01120
#1	242.17	486.70	504.66	501.47	480.98	477920.	462.43
#2	244.57	491.09	504.10	502.12	480.09	479080.	462.36
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	250.00	500.00	500.00	500.00	500.00	500000.	500.00
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	443.59	468.68	467.55	188550.	17.596	487860.	467.42
SDev	.13	.68	.50	152.	15.109	413.	.54
%RSD	.02937	.14520	.10632	.08038	85.866	.08473	.11602
#1	443.50	468.20	467.90	188440.	6.9125	487570.	467.03
#2	443.69	469.16	467.20	188660.	28.280	488160.	467.80
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass
Value	500.00	500.00	500.00	200000.		500000.	500.00
Range	20.000	20.000	20.000	20.000		20.000	20.000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	488.48	418.57	443.17	613.26	382.51	527.97	480.73
SDev	1.83	15.34	.89	2.73	.35	.67	11.16
%RSD	.37487	3.6639	.20117	.44589	.09157	.12761	2.3225
#1	487.18	407.73	442.54	611.33	382.26	528.44	472.84
#2	489.77	429.41	443.80	615.19	382.75	527.49	488.63
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	500.00		500.00			500.00	
Range	20.000		20.000			20.000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	522.96	2557.0	Q616.87	Q667.29	499.53	451.23	467.67
SDev	1.75	3.0	.41	1.93	1.66	.24	3.27
%RSD	.33384	.11604	.06600	.28891	.33289	.05338	.69829
#1	524.20	2554.9	Q616.58	Q665.93	498.35	451.40	469.98
#2	521.73	2559.1	Q617.15	Q668.66	500.70	451.06	465.36
Errors	NOCHECK	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass
Value		2500.0	500.00	500.00	500.00	500.00	500.00
Range		20.000	20.000	20.000	20.000	20.000	20.000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	471260.	459.3	508.9
SDev	444.	1.1	2.6
%RSD	.09422	.2491	.5017
#1	470950.	458.5	507.1
#2	471580.	460.2	510.7
Errors	QC Pass	QC Pass	QC Pass
Value	500000.	500.0	500.0
Range	20.000	20.00	20.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	40109	--	--	--	--	--	--
SDev	57.98276	--	--	--	--	--	--
%RSD	.1445630	--	--	--	--	--	--
#1	40150	--	--	--	--	--	--
#2	40068	--	--	--	--	--	--

Method: PACE2006 Sample Name: icsa Operator:
Run Time: 06/15/10 08:27:12
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-2.7728	3.8359	4.1647	1.5491	-1.5388	478700.	-.25942
SDev	.6337	1.4737	.8375	.0534	.0110	454.	.25313
%RSD	22.856	38.419	20.109	3.4443	.71807	.09488	97.578
#1	-2.3247	2.7938	4.7569	1.5868	-1.5466	478380.	-.43841
#2	-3.2209	4.8780	3.5725	1.5113	-1.5309	479030.	-.08043
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	500000.	.00000
Range	10.000	20.000	100.00	20.000	6.0000	100000.	2.0000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-3.9917	-3.4604	-9.5664	188630.	-9.1505	487630.	-5.2802
SDev	.2853	.6673	.0151	32.	13.8859	383.	.0375
%RSD	7.1465	19.285	.15767	.01705	151.75	.07847	.70981
#1	-4.1934	-3.9322	-9.5771	188660.	-18.969	487360.	-5.2537
#2	-3.7900	-2.9885	-9.5558	188610.	.66831	487900.	-5.3067
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	200000.	.00000	500000.	.00000
Range	20.000	10.000	20.000	40000.	500.00	100000.	10.000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3.6908	-106.96	-2.6843	149.04	-75.475	5.7399	-15.447
SDev	.1241	296.20	.6283	.91	1.571	3.3226	26.696
%RSD	3.3627	276.93	23.408	.61298	2.0815	57.886	172.82
#1	3.6030	-316.41	-3.1286	149.68	-76.585	3.3905	3.4298
#2	3.7785	102.49	-2.2400	148.39	-74.364	8.0894	-34.324
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	.00000	.00000	.00000			.00000	
Range	40.000	2000.0	20.000			12.000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	26.919	73.596	12.862	2.6952	-.77967	-3.6953	13.177
SDev	.794	3.775	2.647	.2530	.08623	.8520	6.029
%RSD	2.9488	5.1299	20.577	9.3855	11.060	23.056	45.756
#1	26.358	70.927	14.734	2.5163	-.84065	-4.2977	8.9134
#2	27.480	76.266	10.991	2.8741	-.71870	-3.0928	17.440
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.00000	.00000	.00000	.00000	.00000	.00000
Range		400.00	20.000	20.000	20.000	20.000	100.00

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	473090.	-.7124	12.81
SDev	.	.7437	8.36
%RSD	.00005	104.4	65.26
#1	473090.	-1.238	18.72
#2	473090.	-.1866	6.899
Errors	QC Pass	QC Pass	QC Pass
Value	500000.	.0000	.0000
Range	100000.	10.00	20.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	39800	--	--	--	--	--	--
SDev	2.121320	--	--	--	--	--	--
%RSD	.0053300	--	--	--	--	--	--
#1	39798	--	--	--	--	--	--
#2	39801	--	--	--	--	--	--

Method: PACE2006 Standard: blank
Run Time: 06/16/10 07:31:41

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Avge	-.00002	.00118	.00048	.00036	-.00019	.00039	-.00014
SDev	.00025	.00004	.00014	.00000	.00002	.00005	.00122
%RSD	1106.2	3.6317	29.208	.40922	8.7266	12.528	851.84
#1	.00016	.00121	.00058	.00036	-.00018	.00036	-.00101
#2	-.00020	.00115	.00038	.00036	-.00020	.00043	.00072

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Avge	.00010	.00009	.00213	-.00048	-.00114	-.00001	.00011
SDev	.00049	.00016	.00024	.00056	.00000	.00024	.00000
%RSD	482.72	177.01	11.503	115.25	.40922	2033.5	.40922
#1	-.00025	.00020	.00230	-.00009	-.00114	.00016	.00011
#2	.00045	-.00002	.00196	-.00088	-.00115	-.00018	.00011

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Avge	.00019	-.00072	.00289	.04049	-.01197	.00173	.00284
SDev	.00011	.00038	.00196	.00131	.00273	.00091	.00231
%RSD	57.892	53.384	67.655	3.2296	22.798	52.911	81.326
#1	.00027	-.00045	.00427	.03957	-.01004	.00237	.00121
#2	.00011	-.00099	.00151	.04142	-.01390	.00108	.00448

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Avge	-.00397	.00633	-.00003	.01147	-.00015	.00150	-.00370
SDev	.00176	.00007	.00014	.00013	.00008	.00004	.00068
%RSD	44.314	1.0953	427.57	1.1115	54.741	2.5199	18.402
#1	-.00273	.00637	-.00013	.01156	-.00009	.00148	-.00322
#2	-.00522	.00628	.00007	.01138	-.00020	.00153	-.00418

Elem	Al3082
Avge	-.00994
SDev	.00021
%RSD	2.1448
#1	-.01009
#2	-.00979

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	44581	--	--	--	--	--	--
SDev	182.4335	--	--	--	--	--	--
%RSD	.4092182	--	--	--	--	--	--
#1	44710	--	--	--	--	--	--
#2	44452	--	--	--	--	--	--

Method: PACE2006 Standard: ag 2
Run Time: 06/16/10 07:37:21

Elem	Ag3280
Avge	.75671
SDev	.00028
%RSD	.03771
#1	.75651
#2	.75691

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42655	--	--	--	--	--	--
SDev	22.62742	--	--	--	--	--	--
%RSD	.0530475	--	--	--	--	--	--
#1	42671	--	--	--	--	--	--
#2	42639	--	--	--	--	--	--

Method: PACE2006 Standard: mixstd 3
Run Time: 06/16/10 07:41:58

Elem	As1890	Mo2020	Si2881
Avge	11.936	.89244	.32921
SDev	.009	.00047	.00029
%RSD	.07290	.05314	.08815
#1	11.942	.89211	.32900
#2	11.930	.89278	.32941

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42804	--	--	--	--	--	--
SDev	74.24622	--	--	--	--	--	--
%RSD	.1734542	--	--	--	--	--	--
#1	42857	--	--	--	--	--	--
#2	42752	--	--	--	--	--	--

Method: PACE2006 Standard: mixstd 5
Run Time: 06/16/10 07:47:06

Elem	B_2496	Mg2790	Sb2068	Tl1908
Avge	.25486	1.8113	1.3418	3.1959
SDev	.00043	.0175	.0167	.0322
%RSD	.16908	.96759	1.2418	1.0081
#1	.25516	1.8237	1.3536	3.2187
#2	.25455	1.7989	1.3300	3.1731

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42597	--	--	--	--	--	--
SDev	649.1240	--	--	--	--	--	--
%RSD	1.523873	--	--	--	--	--	--
#1	42138	--	--	--	--	--	--
#2	43056	--	--	--	--	--	--

Method: PACE2006 Standard: mixstd 2
Run Time: 06/16/10 07:52:15

Elem	Ba4934	Co2286	Cu3247	Fe2714	V_2924
Avge	.32624	.94491	.91117	2.7814	.19953
SDev	.00029	.00081	.00058	.0006	.00039
%RSD	.08881	.08626	.06340	.02209	.19735
#1	.32603	.94548	.91157	2.7809	.19981
#2	.32644	.94433	.91076	2.7818	.19925

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42680	--	--	--	--	--	--
SDev	48.79037	--	--	--	--	--	--
%RSD	.1143154	--	--	--	--	--	--
#1	42646	--	--	--	--	--	--
#2	42715	--	--	--	--	--	--

Method: PACE2006 Standard: mixstd 1
Run Time: 06/16/10 07:56:53

Elem	Be3130	Cd2265	Mn2576	2203/1	2203/2	1960/1	1960/2
Avge	3.2134	18.282	2.0657	44.174	37.777	2.0642	2.1174
SDev	.0007	.025	.0042	.691	.077	.0381	.0004
%RSD	.02303	.13690	.20491	1.5645	.20281	1.8480	.01959
#1	3.2128	18.300	2.0687	44.663	37.832	2.0912	2.1177
#2	3.2139	18.264	2.0627	43.685	37.723	2.0372	2.1171

Elem	Zn2062
Avge	1.5842
SDev	.0017
%RSD	.10652
#1	1.5854
#2	1.5831

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42865	--	--	--	--	--	--
SDev	103.2376	--	--	--	--	--	--
%RSD	.2408435	--	--	--	--	--	--
#1	42792	--	--	--	--	--	--
#2	42938	--	--	--	--	--	--

Method: PACE2006 Standard: mixstd 4
Run Time: 06/16/10 08:03:19

Elem	Ca3158	Cr2677	K_7664	Na3302	Ni2316	Al3082
Avge	3.2737	.45252	.25866	.07670	2.1672	.84715
SDev	.0006	.00018	.00012	.00056	.0103	.00160
%RSD	.01827	.03951	.04477	.73116	.47322	.18846
#1	3.2733	.45240	.25874	.07709	2.1745	.84828
#2	3.2742	.45265	.25858	.07630	2.1600	.84602

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42700	--	--	--	--	--	--
SDev	183.1407	--	--	--	--	--	--
%RSD	.4288958	--	--	--	--	--	--
#1	42571	--	--	--	--	--	--
#2	42830	--	--	--	--	--	--

Method: PACE2006 Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag3280	328.068	ag 2	blank	2642.94	.060657	06/16/10 08:03:19
As1890	189.042	mixstd 3	blank	837.916	-.986684	06/16/10 08:03:19
B_2496	249.678	mixstd 5	blank	7862.41	-3.78953	06/16/10 08:03:19
Ba4934	493.409	mixstd 2	blank	3068.62	-1.10133	06/16/10 08:03:19
Be3130	313.042	mixstd 1	blank	311.182	.059342	06/16/10 08:03:19
Ca3158	315.887	mixstd 4	blank	15274.9	-5.99762	06/16/10 08:03:19
Cd2265	226.502	mixstd 1	blank	164.096	.023516	06/16/10 08:03:19
Co2286	228.616	mixstd 2	blank	1061.00	-.108166	06/16/10 08:03:19
Cr2677	267.716	mixstd 4	blank	2210.34	-.197605	06/16/10 08:03:19
Cu3247	324.753	mixstd 2	blank	1080.39	-2.30172	06/16/10 08:03:19
Fe2714	271.441	mixstd 2	blank	35947.2	17.3772	06/16/10 08:03:19
K_7664	766.491	mixstd 4	blank	76981.0	88.0658	06/16/10 08:03:19
Mg2790	279.078	mixstd 5	blank	11041.5	.129213	06/16/10 08:03:19
Mn2576	257.610	mixstd 1	blank	968.231	-.108593	06/16/10 08:03:19
Mo2020	202.030	mixstd 3	blank	2241.52	-.426872	06/16/10 08:03:19
Na3302	330.232	mixstd 4	blank	128776.	92.5360	06/16/10 08:03:19
Ni2316	231.604	mixstd 4	blank	462.052	-1.33515	06/16/10 08:03:19
2203/1	220.351	mixstd 1	blank	226.640	-9.17681	06/16/10 08:03:19
2203/2	220.352	mixstd 1	blank	264.625	3.16824	06/16/10 08:03:19
Sb2068	206.838	mixstd 5	blank	2984.87	-5.14987	06/16/10 08:03:19
1960/1	196.021	mixstd 1	blank	1940.83	-5.51635	06/16/10 08:03:19
1960/2	196.022	mixstd 1	blank	1885.08	7.49113	06/16/10 08:03:19
Si2881	288.158	mixstd 3	blank	30934.5	-195.674	06/16/10 08:03:19
Sn1899	189.989	mixstd 6	blank	8778.92	.292819	06/16/10 08:03:19
Ti3372	337.280	mixstd 6	blank	620.369	-7.11764	06/16/10 08:03:19
V_2924	292.402	mixstd 2	blank	5020.95	.732886	06/16/10 08:03:19
Zn2062	206.200	mixstd 1	blank	1895.45	-2.84878	06/16/10 08:03:19
Tl1908	190.864	mixstd 5	blank	1250.15	4.62872	06/16/10 08:03:19
Al3082	308.215	mixstd 4	blank	11659.1	115.851	06/16/10 08:03:19
Pb2203	220.353	STD4	STD1-Blank	1.00000	.000000	*NOT STANDARDIZED
Se1960	196.026	STD4	STD1-Blank	1.00000	.000000	*NOT STANDARDIZED

Method: PACE2006 Sample Name: icvccv Operator:
Run Time: 06/16/10 08:08:28
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	486.00	1031.2	977.78	1042.0	1017.2	10562.	1013.0
SDev	.54	7.3	4.07	4.7	7.7	38.	4.0
%RSD	.11037	.70390	.41600	.44924	.76159	.36429	.39119
#1	486.38	1036.4	980.66	1045.3	1022.7	10589.	1015.8
#2	485.62	1026.1	974.91	1038.7	1011.7	10535.	1010.2
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.00	1000.0	1000.0	1000.0	1000.0	10000.	1000.0
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1008.5	1030.9	981.97	10515.	10574.	10071.	1021.1
SDev	2.4	4.5	2.83	23.	55.	47.	4.3
%RSD	.24174	.43477	.28869	.21713	.52000	.46903	.41979
#1	1010.3	1034.1	983.97	10531.	10613.	10105.	1024.2
#2	1006.8	1027.7	979.96	10499.	10535.	10038.	1018.1
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1000.0	1000.0	1000.0	10000.	10000.	10000.	1000.0
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1010.2	10705.	1028.1	1018.1	1014.0	1062.1	1019.3
SDev	1.1	16.	7.6	.1	4.2	7.8	4.2
%RSD	.10706	.15209	.73720	.00657	.40948	.73387	.41160
#1	1010.9	10717.	1033.5	1018.2	1016.9	1067.6	1016.3
#2	1009.4	10694.	1022.8	1018.1	1011.1	1056.6	1022.3
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	1000.0	10000.	1000.0			1000.0	
Range	10.000	10.000	10.000			10.000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1030.0	5282.7	Q1366.6	Q1365.3	1047.1	1007.1	983.59
SDev	.6	30.8	12.9	8.1	3.0	1.1	1.85
%RSD	.05840	.58289	.94599	.59258	.28322	.11371	.18773
#1	1030.4	5304.5	Q1375.8	Q1371.1	1049.2	1007.9	984.89
#2	1029.6	5261.0	Q1357.5	Q1359.6	1045.0	1006.3	982.28
Errors	NOCHECK	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass
Value		5000.0	1000.0	1000.0	1000.0	1000.0	1000.0
Range		10.000	10.000	10.000	10.000	10.000	10.000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	10344.	1015.	1026.
SDev	46.	3.	1.
%RSD	.44685	.2750	.0970
#1	10376.	1017.	1026.
#2	10311.	1013.	1027.
Errors	QC Pass	QC Pass	QC Pass
Value	10000.	1000.	1000.
Range	10.000	10.00	10.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42408	--	--	--	--	--	--
SDev	123.7437	--	--	--	--	--	--
%RSD	.2917967	--	--	--	--	--	--
#1	42320	--	--	--	--	--	--
#2	42495	--	--	--	--	--	--

Method: PACE2006 Sample Name: icbccb Operator:
Run Time: 06/16/10 08:14:09
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.2984	.86581	3.8189	-.70684	.29952	15.071	.16033
SDev	.0014	.26614	.1291	.05113	.02018	.521	.03794
%RSD	.10780	30.739	3.3799	7.2337	6.7373	3.4556	23.664
#1	-1.2974	.67762	3.9101	-.74300	.28525	14.703	.13350
#2	-1.2994	1.0540	3.7276	-.67069	.31379	15.439	.18715
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	5.0000	10.000	50.000	50.000	50.000	200.00	1.0000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.32316	1.5849	.83361	26.612	5.3034	8.5636	.46735
SDev	.22778	.0338	.13757	8.332	2.4569	.2269	.01631
%RSD	70.487	2.1332	16.503	31.307	46.327	2.6501	3.4889
#1	.16209	1.6088	.93088	20.721	3.5661	8.7241	.45582
#2	.48422	1.5610	.73633	32.504	7.0406	8.4032	.47888
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	10.000	5.0000	10.000	50.000	250.00	200.00	5.0000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.1554	96.911	.55561	-5.5793	3.9312	-1.9415	-6.1559
SDev	1.5788	104.49	.68489	2.0395	1.3954	4.3378	7.3778
%RSD	73.248	107.82	123.27	36.554	35.495	223.43	119.85
#1	3.2717	170.80	1.0399	-7.0215	2.9445	1.1258	-.93899
#2	1.0390	23.023	.07132	-4.1372	4.9178	-5.0087	-11.373
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	.00000	.00000	.00000			.00000	
Range	20.000	1000.0	10.000			6.0000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4.0096	43.261	1.1113	.84990	.61464	.69227	1.0155
SDev	2.5229	1.758	1.4607	.28525	.99702	.19144	.7527
%RSD	62.921	4.0632	131.45	33.562	162.21	27.654	74.115
#1	5.7935	42.018	2.1441	.64820	1.3196	.55690	1.5477
#2	2.2256	44.504	.07837	1.0516	-.09036	.82764	.48331
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.00000	.00000	.00000	.00000	.00000	.00000
Range		200.00	20.000	20.000	10.000	10.000	20.000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	10.119	.7643	.6247
SDev	4.159	1.610	4.140
%RSD	41.095	210.6	662.7
#1	7.1788	-.3740	3.552
#2	13.060	1.903	-2.302
Errors	QC Pass	QC Pass	QC Pass
Value	.00000	.0000	.0000
Range	50.000	5.000	10.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42786	--	--	--	--	--	--
SDev	45.25483	--	--	--	--	--	--
%RSD	.1057702	--	--	--	--	--	--
#1	42818	--	--	--	--	--	--
#2	42754	--	--	--	--	--	--

Method: PACE2006 Sample Name: crdl Operator:
Run Time: 06/16/10 08:19:50
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	8.5823	12.325	150.69	3.5955	10.103	523.28	1.1982
SDev	1.5101	1.705	3.02	.3689	.025	2.59	.3018
%RSD	17.596	13.834	2.0067	10.261	.25216	.49431	25.192
#1	7.5145	13.530	148.55	3.3346	10.085	521.45	.98475
#2	9.6501	11.119	152.83	3.8564	10.121	525.10	1.4116
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.000	10.000	150.00	3.0000	10.000	500.00	1.0000
Range	50.000	50.000	20.000	50.000	20.000	20.000	50.000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	20.307	19.991	11.582	131.92	5042.6	495.12	9.9472
SDev	.815	.059	.077	5.60	16.1	3.54	.0959
%RSD	4.0126	.29567	.66166	4.2417	.31905	.71567	.96368
#1	19.731	19.949	11.528	135.87	5031.2	492.61	9.8794
#2	20.883	20.033	11.636	127.96	5053.9	497.62	10.015
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	20.000	10.000	100.00	5000.0	500.00	10.000
Range	20.000	20.000	50.000	50.000	20.000	20.000	20.000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	30.921	2164.0	40.466	3.4002	9.6019	7.3706	7.9690
SDev	.289	121.6	.653	.9956	2.7158	6.9417	8.1044
%RSD	.93502	5.6189	1.6130	29.281	28.284	94.180	101.70
#1	31.125	2078.0	40.004	4.1042	7.6815	Q2.4621	13.700
#2	30.717	2250.0	40.928	2.6962	11.522	12.279	2.2383
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	30.000	2000.0	40.000			10.000	
Range	20.000	50.000	20.000			50.000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	10.728	36.571	Q91.922	28.265	31.283	41.611	20.702
SDev	3.152	1.217	1.017	.085	.340	.478	1.671
%RSD	29.386	3.3290	1.1069	.30183	1.0875	1.1480	8.0701
#1	8.4984	35.710	Q91.202	28.205	31.042	41.274	21.883
#2	12.957	37.432	Q92.641	28.325	31.523	41.949	19.520
Errors	NOCHECK	NOCHECK	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value			70.000	20.000	30.000	40.000	20.000
Range			20.000	50.000	20.000	20.000	50.000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	213.09	7.537	9.809
SDev	7.21	1.480	.596
%RSD	3.3857	19.64	6.077
#1	207.99	6.490	10.23
#2	218.19	8.583	9.388
Errors	QC Pass	QC Pass	QC Pass
Value	200.00	6.000	10.00
Range	50.000	50.00	50.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42798	--	--	--	--	--	--
SDev	127.9863	--	--	--	--	--	--
%RSD	.2990440	--	--	--	--	--	--
#1	42889	--	--	--	--	--	--
#2	42708	--	--	--	--	--	--

Method: PACE2006 Sample Name: icsa Operator:
Run Time: 06/16/10 08:25:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.2309	7.3217	2.1538	1.9761	-1.5212	494140.	-.38191
SDev	.3269	.5153	.1259	.3235	.0126	2494.	.34919
%RSD	26.554	7.0377	5.8473	16.372	.83131	.50479	91.433
#1	-1.4620	6.9573	2.2428	2.2049	-1.5123	492370.	-.62882
#2	-.99979	7.6860	2.0647	1.7473	-1.5302	495900.	-.13499
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	500000.	.00000
Range	10.000	20.000	100.00	20.000	6.0000	100000.	2.0000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-3.3246	-2.5601	-4.9961	194780.	51.329	489350.	-3.8513
SDev	.0192	.5164	1.8528	886.	6.881	2000.	.3465
%RSD	.57850	20.170	37.084	.45482	13.405	.40861	8.9980
#1	-3.3382	-2.1950	-3.6860	194150.	56.194	487940.	-3.6063
#2	-3.3110	-2.9253	-6.3063	195410.	46.464	490770.	-4.0963
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	200000.	.00000	500000.	.00000
Range	20.000	10.000	20.000	40000.	500.00	100000.	10.000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.8361	478.38	1.3403	168.84	-80.495	3.2793	-17.788
SDev	1.3379	3.53	3.1525	1.02	2.522	1.3576	20.174
%RSD	47.172	.73839	235.21	.60129	3.1328	41.399	113.41
#1	3.7821	475.88	3.5695	169.56	-82.278	4.2393	-3.5230
#2	1.8901	480.87	-.88884	168.12	-78.712	2.3193	-32.054
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	.00000	.00000	.00000			.00000	
Range	40.000	2000.0	20.000			12.000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	27.631	46.904	18.809	3.1637	.70108	-3.8625	13.301
SDev	7.228	3.057	2.210	.4303	.46181	.4246	4.318
%RSD	26.157	6.5182	11.750	13.601	65.872	10.994	32.459
#1	22.521	49.066	Q20.371	3.4680	1.0276	-4.1627	16.354
#2	32.742	44.742	17.246	2.8594	.37453	-3.5622	10.249
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.00000	.00000	.00000	.00000	.00000	.00000
Range		400.00	20.000	20.000	20.000	20.000	100.00

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	486890.	2.534	12.51
SDev	2022.	1.344	1.90
%RSD	.41526	53.05	15.17
#1	485460.	1.583	13.85
#2	488320.	3.484	11.17
Errors	QC Pass	QC Pass	QC Pass
Value	500000.	.0000	.0000
Range	100000.	10.00	20.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	39884	--	--	--	--	--	--
SDev	37.47666	--	--	--	--	--	--
%RSD	.0939653	--	--	--	--	--	--
#1	39910	--	--	--	--	--	--
#2	39857	--	--	--	--	--	--

Method: PACE2006 Sample Name: icsab Operator:
Run Time: 06/16/10 08:34:39
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	254.31	525.60	501.39	517.36	507.04	493820.	479.25
SDev	.21	1.28	1.32	1.10	2.31	16.	.47
%RSD	.08272	.24290	.26386	.21239	.45496	.00332	.09818
#1	254.16	524.70	502.33	518.14	508.67	493830.	479.58
#2	254.45	526.51	500.46	516.58	505.41	493810.	478.92
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	250.00	500.00	500.00	500.00	500.00	500000.	500.00
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	456.06	486.82	484.25	195790.	50.300	490050.	487.48
SDev	.22	.75	.03	144.	2.723	386.	.27
%RSD	.04810	.15501	.00705	.07365	5.4142	.07876	.05522
#1	456.21	486.29	484.23	195890.	52.226	490320.	487.29
#2	455.90	487.35	484.28	195680.	48.374	489770.	487.67
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass
Value	500.00	500.00	500.00	200000.		500000.	500.00
Range	20.000	20.000	20.000	20.000		20.000	20.000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	499.91	521.41	460.60	646.25	398.49	536.39	494.38
SDev	.31	94.42	1.02	6.48	4.55	5.47	4.87
%RSD	.06212	18.109	.22065	1.0022	1.1425	1.0197	.98547
#1	499.69	454.65	461.32	641.67	401.71	540.26	490.94
#2	500.13	588.18	459.89	650.83	395.27	532.52	497.83
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	500.00		500.00			500.00	
Range	20.000		20.000			20.000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	536.86	2526.0	Q651.23	Q674.56	513.69	466.15	471.09
SDev	5.02	4.2	4.20	.13	.22	2.00	2.00
%RSD	.93445	.16503	.64491	.01878	.04262	.43003	.42420
#1	540.41	2529.0	Q654.20	Q674.47	513.85	464.73	472.51
#2	533.32	2523.1	Q648.26	Q674.65	513.54	467.56	469.68
Errors	NOCHECK	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass
Value		2500.0	500.00	500.00	500.00	500.00	500.00
Range		20.000	20.000	20.000	20.000	20.000	20.000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	487060.	481.0	522.7
SDev	1053.	.9	1.7
%RSD	.21626	.1829	.3298
#1	487800.	481.6	523.9
#2	486310.	480.4	521.5
Errors	QC Pass	QC Pass	QC Pass
Value	500000.	500.0	500.0
Range	20.000	20.00	20.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	39800	--	--	--	--	--	--
SDev	3.535534	--	--	--	--	--	--
%RSD	.0088831	--	--	--	--	--	--
#1	39803	--	--	--	--	--	--
#2	39798	--	--	--	--	--	--

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ICP Metals 6010B

Section 3: Remaining Sequence Data

** Calibration Verification Standards*
** Calibration Verification Blanks*
** Method Blanks*
** Laboratory Control Samples (LCS)*
** Matrix Spike and Spike Duplicate Samples (MS/MSD)*
** Client Sample Raw Data*

Method: PACE2006 Sample Name: icvccv Operator:
Run Time: 06/15/10 14:15:01
Comment: 6010B
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	478.69	1023.7	Q1114.6	1021.6	Q899.75	10931.	1013.3
SDev	4.04	11.8	14.0	10.2	6.79	105.	8.5
%RSD	.84452	1.1559	1.2550	.99765	.75444	.96396	.84052
#1	475.84	1015.4	Q1104.7	1014.4	Q894.95	10857.	1007.2
#2	481.55	1032.1	Q1124.5	1028.8	904.55	Q11006.	1019.3
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Fail	QC Pass	QC Pass
Value	500.00	1000.0	1000.0	1000.0	1000.0	10000.	1000.0
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1047.2	1048.9	1007.5	10594.	10287.	10871.	1024.6
SDev	11.9	11.7	9.0	104.	69.	111.	10.2
%RSD	1.1334	1.1165	.89820	.98142	.66653	1.0194	.99682
#1	1038.8	1040.6	1001.1	10520.	10238.	10793.	1017.4
#2	1055.5	1057.2	1013.9	10667.	10335.	10949.	1031.8
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1000.0	1000.0	1000.0	10000.	10000.	10000.	1000.0
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	989.89	9640.0	965.30	1039.8	955.42	1068.8	1031.6
SDev	7.29	21.8	10.77	12.3	15.97	16.1	11.3
%RSD	.73641	.22631	1.1157	1.1790	1.6717	1.5059	1.0989
#1	984.74	9655.5	957.69	1031.1	944.13	1057.4	1023.5
#2	995.05	9624.6	972.92	1048.4	966.72	1080.2	1039.6
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	1000.0	10000.	1000.0			1000.0	
Range	10.000	10.000	10.000			10.000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1024.0	Q5573.0	Q1341.8	Q1337.9	1093.4	1079.8	1017.8
SDev	16.7	54.1	9.4	11.9	10.7	10.3	10.0
%RSD	1.6307	.97134	.70084	.88838	.97573	.94986	.97861
#1	1012.2	Q5534.7	Q1335.2	Q1329.5	1085.8	1072.6	1010.8
#2	1035.8	Q5611.3	Q1348.5	Q1346.4	Q1100.9	1087.1	1024.8
Errors	NOCHECK	QC Fail	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass
Value		5000.0	1000.0	1000.0	1000.0	1000.0	1000.0
Range		10.000	10.000	10.000	10.000	10.000	10.000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	9997.9	983.5	1027.
SDev	101.7	14.7	15.
%RSD	1.0167	1.498	1.453
#1	9926.0	973.1	1016.
#2	10070.	993.9	1037.
Errors	QC Pass	QC Pass	QC Pass
Value	10000.	1000.	1000.
Range	10.000	10.00	10.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42802	--	--	--	--	--	--
SDev	470.2260	--	--	--	--	--	--
%RSD	1.098595	--	--	--	--	--	--
#1	43135	--	--	--	--	--	--
#2	42470	--	--	--	--	--	--

Method: PACE2006 Sample Name: icbccb Operator:
Run Time: 06/15/10 14:20:42
Comment: 6010B
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.3468	-4.9400	7.2134	-.18702	.51881	34.733	.10990
SDev	1.5860	4.2678	3.4584	.39976	.00549	1.590	.09964
%RSD	117.76	86.392	47.944	213.75	1.0590	4.5791	90.657
#1	-.22534	-7.9578	9.6589	.09565	.52270	35.858	.18036
#2	-2.4684	-1.9222	4.7680	-.46969	.51493	33.609	.03945
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	5.0000	10.000	50.000	50.000	50.000	200.00	1.0000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.37637	1.7156	1.2435	44.102	-31.382	10.191	.82646
SDev	.21811	.2130	.2605	18.648	4.406	2.345	.06329
%RSD	57.951	12.416	20.946	42.284	14.038	23.016	7.6580
#1	-.22214	1.5649	1.4276	Q57.288	-28.267	11.849	.78170
#2	-.53060	1.8662	1.0593	30.916	-34.497	8.5321	.87121
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	10.000	5.0000	10.000	50.000	250.00	200.00	5.0000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.4348	-15.014	.68406	.60327	-1.1593	-1.9901	-1.3278
SDev	.4476	156.035	2.7170	.37349	2.0975	3.5907	.1676
%RSD	18.382	1039.3	397.19	61.910	180.93	180.43	12.626
#1	2.7513	95.320	2.6053	.33918	.32386	.54891	-1.2092
#2	2.1183	-125.35	-1.2372	.86737	-2.6424	-4.5291	-1.4463
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	.00000	.00000	.00000			.00000	
Range	20.000	1000.0	10.000			6.0000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5.3663	79.601	-1.3952	1.1548	-.52995	1.2526	-.41993
SDev	3.9311	7.634	2.5866	.2873	.79985	.2624	1.76269
%RSD	73.256	9.5900	185.39	24.878	150.93	20.951	419.76
#1	2.5866	84.999	-3.2242	1.3580	.03563	1.4382	.82648
#2	8.1460	74.203	.43377	.95168	-1.0955	1.0670	-1.6663
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.00000	.00000	.00000	.00000	.00000	.00000
Range		200.00	20.000	20.000	10.000	10.000	20.000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	-.30371	-.5721	3.137
SDev	6.13555	1.2746	2.566
%RSD	2020.2	222.8	81.80
#1	-4.6422	.3292	1.323
#2	4.0348	-1.473	4.952
Errors	QC Pass	QC Pass	QC Pass
Value	.00000	.0000	.0000
Range	50.000	5.000	10.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42942	--	--	--	--	--	--
SDev	388.9087	--	--	--	--	--	--
%RSD	.9056605	--	--	--	--	--	--
#1	42667	--	--	--	--	--	--
#2	43217	--	--	--	--	--	--

Method: PACE2006 Sample Name: icsa Operator:
Run Time: 06/15/10 14:26:45
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.8171	-.00830	4.2553	2.0089	-1.2240	504340.	1.5588
SDev	.2766	6.65756	3.4752	.2589	.0297	1233.	.0765
%RSD	15.224	80232.	81.667	12.887	2.4253	.24440	4.9105
#1	-1.6215	-4.7159	6.7126	2.1920	-1.2450	503470.	1.5047
#2	-2.0127	4.6993	1.7980	1.8259	-1.2030	505220.	1.6129
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	500000.	.00000
Range	10.000	20.000	100.00	20.000	6.0000	100000.	2.0000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-4.4711	-3.1102	-10.563	195520.	-1.3825	522190.	-5.6180
SDev	.0622	.6298	.646	489.	10.9941	1167.	.1890
%RSD	1.3916	20.249	6.1154	.25006	795.24	.22355	3.3636
#1	-4.4271	-3.5556	-10.107	195170.	-9.1565	521360.	-5.4844
#2	-4.5151	-2.6649	-11.020	195870.	6.3916	523010.	-5.7516
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	200000.	.00000	500000.	.00000
Range	20.000	10.000	20.000	40000.	500.00	100000.	10.000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.3280	125.63	-2.8120	191.44	-99.391	8.1159	-9.5878
SDev	.4610	27.59	.1634	.72	5.001	4.0766	7.9169
%RSD	19.803	21.957	5.8109	.37687	5.0319	50.230	82.572
#1	2.6540	145.14	-2.6965	191.95	-102.93	10.999	-3.9897
#2	2.0020	106.13	-2.9276	190.93	-95.855	5.2333	-15.186
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	.00000	.00000	.00000			.00000	
Range	40.000	2000.0	20.000			12.000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	29.930	89.249	12.438	2.6271	-2.6492	-.39418	11.376
SDev	.290	.481	2.676	.0976	.2613	.13475	1.088
%RSD	.96764	.53860	21.513	3.7156	9.8616	34.186	9.5650
#1	30.134	88.909	10.546	2.5581	-2.4645	-.48946	12.146
#2	29.725	89.589	14.330	2.6962	-2.8339	-.29889	10.607
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.00000	.00000	.00000	.00000	.00000	.00000
Range		400.00	20.000	20.000	20.000	20.000	100.00

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	470300.	-2.545	16.77
SDev	992.	3.096	2.83
%RSD	.21101	121.6	16.87
#1	469600.	-4.734	18.77
#2	471000.	-.3565	14.77
Errors	QC Pass	QC Pass	QC Pass
Value	500000.	.0000	.0000
Range	100000.	10.00	20.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	39676	--	--	--	--	--	--
SDev	116.6726	--	--	--	--	--	--
%RSD	.2940672	--	--	--	--	--	--
#1	39758	--	--	--	--	--	--
#2	39593	--	--	--	--	--	--

Method: PACE2006 Sample Name: icsab Operator:
Run Time: 06/15/10 14:32:47
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	248.83	515.91	566.30	513.88	446.76	505820.	481.18
SDev	1.12	6.20	7.37	1.08	.23	631.	.78
%RSD	.45110	1.2025	1.3022	.21103	.05204	.12483	.16255
#1	249.63	511.52	561.08	513.11	446.59	505370.	480.63
#2	248.04	520.29	571.51	514.65	446.92	506260.	481.73
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	250.00	500.00	500.00	500.00	500.00	500000.	500.00
Range	20.000	20.000	20.000	20.000	20.000	20.000	20.000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	469.33	493.15	491.11	196260.	-5.4842	523530.	485.90
SDev	1.10	1.25	.20	273.	13.7019	795.	1.03
%RSD	.23376	.25438	.04167	.13892	249.84	.15186	.21253
#1	468.55	492.26	491.25	196070.	4.2045	522970.	485.17
#2	470.11	494.04	490.96	196460.	-15.173	524090.	486.63
Errors	QC Pass	QC Pass	QC Pass	QC Pass	NOCHECK	QC Pass	QC Pass
Value	500.00	500.00	500.00	200000.		500000.	500.00
Range	20.000	20.000	20.000	20.000		20.000	20.000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	484.57	239.17	423.51	683.06	351.46	540.21	514.63
SDev	3.08	156.49	1.41	7.28	3.90	4.50	15.50
%RSD	.63532	65.432	.33207	1.0653	1.1086	.83344	3.0122
#1	482.39	349.82	422.52	688.21	354.22	537.02	525.59
#2	486.75	128.51	424.51	677.92	348.71	543.39	503.67
Errors	QC Pass	NOCHECK	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	500.00		500.00			500.00	
Range	20.000		20.000			20.000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	540.07	2689.9	Q634.35	Q659.73	532.60	494.22	490.64
SDev	1.00	1.4	4.21	1.11	3.03	1.53	2.61
%RSD	.18436	.05351	.66404	.16797	.56831	.31019	.53107
#1	540.77	2688.9	Q631.37	Q660.52	530.46	493.13	488.80
#2	539.36	2690.9	Q637.33	Q658.95	534.74	495.30	492.48
Errors	NOCHECK	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass
Value		2500.0	500.00	500.00	500.00	500.00	500.00
Range		20.000	20.000	20.000	20.000	20.000	20.000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	471140.	461.9	531.6
SDev	203.	5.0	5.8
%RSD	.04317	1.087	1.096
#1	471000.	465.4	535.7
#2	471280.	458.3	527.5
Errors	QC Pass	QC Pass	QC Pass
Value	500000.	500.0	500.0
Range	20.000	20.00	20.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	39536	--	--	--	--	--	--
SDev	221.3244	--	--	--	--	--	--
%RSD	.5597977	--	--	--	--	--	--
#1	39380	--	--	--	--	--	--
#2	39693	--	--	--	--	--	--

Method: PACE2006 Sample Name: 443902 Operator:
Run Time: 06/15/10 15:37:13
Comment: 6010B
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	L-.89875	L-6.5755	11.723	12.210	L.27860	82.511	L-.16457
SDev	.95286	.2051	.810	.030	.04471	1.143	.04590
%RSD	106.02	3.1190	6.9117	.24217	16.050	1.3848	27.893
#1	L-1.5725	L-6.4305	11.150	12.231	L.24698	83.319	L-.19703
#2	L-.22498	L-6.7205	12.296	12.189	L.31021	81.703	L-.13211
Errors	LC Low	LC Low	LC Pass	LC Pass	LC Low	LC Pass	LC Low
High	10000.	35000.	100000.	15000.	10000.	500000.	25000.
Low	1.2000	5.7000	2.8000	4.4000	.80000	14.300	.40000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	L-.71556	L-.44868	1.8487	L1.3100	L11.596	16.173	L-.02272
SDev	.00366	.42795	1.0941	8.8987	8.320	3.382	.09775
%RSD	.51126	95.380	59.183	679.28	71.752	20.913	430.21
#1	L-.71815	L-.75129	L1.0750	L7.6023	L5.7126	18.564	L-.09184
#2	L-.71297	L-.14607	2.6223	L-4.9823	L17.479	13.781	L.04640
Errors	LC Low	LC Low	LC Pass	LC Low	LC Low	LC Pass	LC Low
High	25000.	100000.	100000.	300000.	60000.	500000.	20000.
Low	.80000	.80000	1.3000	15.200	18.700	11.500	.30000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	L1.0863	334.27	L-1.2999	-.51675	-2.7074	L.83128	-2.2757
SDev	1.0747	38.06	.2655	1.51300	1.1329	4.1639	10.8844
%RSD	98.933	11.386	20.427	292.79	41.845	500.90	478.29
#1	L.32637	307.36	L-1.4876	-1.5866	-1.9063	L3.7756	-9.9721
#2	L1.8462	361.18	L-1.1121	.55310	-3.5084	L-2.1130	5.4208
Errors	LC Low	LC Pass	LC Low	NOCHECK	NOCHECK	LC Low	NOCHECK
High	40000.	200000.	100000.			40000.	
Low	2.1000	216.00	1.8000			4.9000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5.0787	62.225	L-1.8746	1.2440	L-.54471	8.8770	L.60106
SDev	4.1733	5.441	2.1456	.0289	1.09868	.0013	4.5152
%RSD	82.173	8.7448	114.46	2.3197	201.70	.01415	751.21
#1	8.0297	58.377	L-3.3917	1.2644	L.23217	8.8761	L3.7938
#2	2.1277	66.073	L-.35743	1.2236	L-1.3216	8.8779	L-2.5917
Errors	NOCHECK	LC Pass	LC Low	LC Pass	LC Low	LC Pass	LC Low
High		100000.	75000.	10000.	100000.	50000.	50000.
Low		20.000	6.4000	.60000	.60000	3.0000	9.0000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	L-16.671	L-1.978	L2.630
SDev	1.698	.252	.841
%RSD	10.187	12.73	31.97
#1	L-17.872	L-1.800	L2.035
#2	L-15.471	L-2.156	L3.224
Errors	LC Low	LC Low	LC Low
High	250000.	50000.	50000.
Low	26.500	2.800	6.700

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	43124	--	--	--	--	--	--
SDev	719.1276	--	--	--	--	--	--
%RSD	1.667561	--	--	--	--	--	--
#1	43633	--	--	--	--	--	--
#2	42616	--	--	--	--	--	--

Method: PACE2006 Sample Name: 443903 Operator:
Run Time: 06/15/10 15:42:52
Comment: 6010B
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	427.02	984.36	1083.6	997.06	876.49	10558.	969.74
SDev	2.09	.88	2.0	.74	.35	5.	.19
%RSD	.48865	.08948	.18647	.07455	.03980	.04891	.01923
#1	428.50	983.74	1082.2	996.54	876.74	10555.	969.87
#2	425.54	984.98	1085.0	997.59	876.25	10562.	969.60
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	35000.	100000.	15000.	10000.	500000.	25000.
Low	1.2000	5.7000	2.8000	4.4000	.80000	14.300	.40000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1008.9	1004.8	984.84	10194.	9730.2	10496.	989.44
SDev	.4	1.6	.51	7.	2.2	6.	.99
%RSD	.04072	.15990	.05197	.06647	.02231	.05371	.09998
#1	1009.2	1005.9	984.48	10189.	9728.7	10492.	988.74
#2	1008.6	1003.6	985.20	10199.	9731.8	10500.	990.14
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	100000.	100000.	300000.	60000.	500000.	20000.
Low	.80000	.80000	1.3000	15.200	18.700	11.500	.30000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	954.07	9618.8	922.04	996.57	921.63	1033.2	978.85
SDev	1.60	23.7	.20	1.08	2.54	3.2	8.56
%RSD	.16791	.24628	.02168	.10869	.27592	.30888	.87409
#1	952.93	9635.5	922.18	997.33	923.43	1035.5	984.90
#2	955.20	9602.0	921.90	995.80	919.83	1030.9	972.80
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK
High	40000.	200000.	100000.			40000.	
Low	2.1000	216.00	1.8000			4.9000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	T11908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	974.31	5314.4	1296.9	1293.3	1058.4	1018.8	973.13
SDev	7.61	11.8	2.7	2.3	.9	1.6	6.24
%RSD	.78098	.22251	.20615	.17994	.08131	.15966	.64161
#1	968.93	5306.0	1295.0	1291.6	1057.8	1017.6	968.71
#2	979.69	5322.7	1298.8	1294.9	1059.0	1019.9	977.54
Errors	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High		100000.	75000.	10000.	100000.	50000.	50000.
Low		20.000	6.4000	.60000	.60000	3.0000	9.0000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	9637.9	946.6	975.8
SDev	16.8	2.1	2.2
%RSD	.17464	.2173	.2281
#1	9626.0	948.0	974.3
#2	9649.8	945.1	977.4
Errors	LC Pass	LC Pass	LC Pass
High	250000.	50000.	50000.
Low	26.500	2.800	6.700

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42800	--	--	--	--	--	--
SDev	36.06245	--	--	--	--	--	--
%RSD	.0842571	--	--	--	--	--	--
#1	42775	--	--	--	--	--	--
#2	42826	--	--	--	--	--	--

Method: PACE2006 Sample Name: 5038203001 Operator:
Run Time: 06/15/10 15:48:32
Comment: 6010B
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	L-1.8823	L1.5287	268.95	15.659	L.26776	49290.	L-.30002
SDev	.0300	1.3569	1.43	.310	.00304	507.	.03591
%RSD	1.5915	88.757	.53131	1.9814	1.1370	1.0280	11.970
#1	L-1.9035	L.56929	267.94	15.879	L.26561	48932.	L-.27462
#2	L-1.8611	L2.4882	269.96	15.440	L.26991	49649.	L-.32541
Errors	LC Low	LC Low	LC Pass	LC Pass	LC Low	LC Pass	LC Low
High	10000.	35000.	100000.	15000.	10000.	500000.	25000.
Low	1.2000	5.7000	2.8000	4.4000	.80000	14.300	.40000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	L-.49309	L-1.5183	L.82825	L12.925	10613.	18900.	8.5255
SDev	.80893	.1381	.41021	13.095	96.	181.	.1541
%RSD	164.05	9.0950	49.528	101.32	.90328	.95771	1.8077
#1	L-1.0651	L-1.6159	L1.1183	22.184	10545.	18772.	8.4166
#2	L.07891	L-1.4206	L.53818	L3.6654	10681.	19028.	8.6345
Errors	LC Low	LC Low	LC Low	LC Low	LC Pass	LC Pass	LC Pass
High	25000.	100000.	100000.	300000.	60000.	500000.	20000.
Low	.80000	.80000	1.3000	15.200	18.700	11.500	.30000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	109.34	88205.	L-.29615	1.2771	-.20597	L-3.1189	3.1247
SDev	.92	1024.	2.03120	3.8431	2.09158	4.8570	5.4780
%RSD	.83699	1.1613	685.88	300.91	1015.5	155.73	175.31
#1	108.69	87481.	L1.1401	-1.4403	1.2730	L-6.5534	-.74885
#2	109.98	88929.	L-1.7324	3.9946	-1.6849	L.31550	6.9982
Errors	LC Pass	LC Pass	LC Low	NOCHECK	NOCHECK	LC Low	NOCHECK
High	40000.	200000.	100000.			40000.	
Low	2.1000	216.00	1.8000			4.9000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.3814	4243.0	L-.66330	L.51622	L-.64897	L1.3849	L-.85189
SDev	.9947	45.3	1.30059	.70618	.56186	.1809	2.12552
%RSD	41.768	1.0675	196.08	136.80	86.578	13.063	249.51
#1	3.0848	4211.0	L.25636	L.01688	L-.25167	L1.2570	L.65108
#2	1.6781	4275.0	L-1.5830	1.0156	L-1.0463	L1.5128	L-2.3549
Errors	NOCHECK	LC Pass	LC Low	LC Low	LC Low	LC Low	LC Low
High		100000.	75000.	10000.	100000.	50000.	50000.
Low		20.000	6.4000	.60000	.60000	3.0000	9.0000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	L-28.158	L.2881	L2.629
SDev	1.824	.1153	1.161
%RSD	6.4792	40.03	44.15
#1	L-29.448	L.3697	L1.808
#2	L-26.868	L.2066	L3.450
Errors	LC Low	LC Low	LC Low
High	250000.	50000.	50000.
Low	26.500	2.800	6.700

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42274	--	--	--	--	--	--
SDev	362.7458	--	--	--	--	--	--
%RSD	.8580926	--	--	--	--	--	--
#1	42530	--	--	--	--	--	--
#2	42017	--	--	--	--	--	--

Method: PACE2006 Sample Name: icvccv Operator:
Run Time: 06/15/10 15:54:12
Comment: 6010B
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	470.57	1008.8	Q1100.1	1002.4	Q888.76	10683.	997.85
SDev	.87	3.4	2.3	.4	1.29	5.	1.10
%RSD	.18576	.33636	.21319	.04166	.14507	.04379	.10986
#1	471.19	1011.2	1098.4	1002.7	Q889.68	10686.	998.62
#2	469.95	1006.4	Q1101.7	1002.1	Q887.85	10679.	997.07
Errors	QC Pass	QC Pass	QC Fail	QC Pass	QC Fail	QC Pass	QC Pass
Value	500.00	1000.0	1000.0	1000.0	1000.0	10000.	1000.0
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1025.5	1030.0	996.36	10395.	10111.	10655.	1009.0
SDev	1.1	1.1	2.01	10.	29.	4.	.6
%RSD	.10405	.10614	.20209	.09601	.28744	.03865	.06285
#1	1026.3	1030.8	997.79	10402.	10132.	10658.	1009.5
#2	1024.8	1029.2	994.94	10388.	10091.	10652.	1008.6
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1000.0	1000.0	1000.0	10000.	10000.	10000.	1000.0
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	970.71	9485.8	937.97	1021.4	935.69	1049.1	1021.4
SDev	1.15	329.4	.73	9.4	2.48	5.9	8.4
%RSD	.11884	3.4724	.07739	.92443	.26481	.56686	.82519
#1	971.52	9718.7	938.48	1028.1	937.44	1053.3	1027.4
#2	969.89	9252.9	937.46	1014.7	933.94	1044.9	1015.5
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	1000.0	10000.	1000.0			1000.0	
Range	10.000	10.000	10.000			10.000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1002.6	5455.2	Q1338.0	Q1313.2	1078.5	1042.2	1002.9
SDev	1.4	4.0	3.6	2.0	.6	1.9	.2
%RSD	.14003	.07247	.27099	.15292	.05901	.17833	.02062
#1	1003.6	5458.0	Q1340.6	Q1314.6	1079.0	1040.9	1003.0
#2	1001.6	5452.4	Q1335.5	Q1311.8	1078.1	1043.5	1002.7
Errors	NOCHECK	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass
Value		5000.0	1000.0	1000.0	1000.0	1000.0	1000.0
Range		10.000	10.000	10.000	10.000	10.000	10.000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	9840.2	964.2	1009.
SDev	11.6	4.8	4.
%RSD	.11828	.4975	.3710
#1	9848.4	967.6	1012.
#2	9832.0	960.8	1006.
Errors	QC Pass	QC Pass	QC Pass
Value	10000.	1000.	1000.
Range	10.000	10.00	10.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42714	--	--	--	--	--	--
SDev	41.01219	--	--	--	--	--	--
%RSD	.0960158	--	--	--	--	--	--
#1	42685	--	--	--	--	--	--
#2	42743	--	--	--	--	--	--

Method: PACE2006 Sample Name: icbccb Operator:
Run Time: 06/15/10 15:59:53
Comment: 6010B
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-2.4121	-4.5026	4.2237	-.43028	.32887	9.7614	-.03553
SDev	2.1628	3.2165	1.2682	.04921	.03573	.4639	.00004
%RSD	89.665	71.435	30.027	11.438	10.866	4.7525	.10031
#1	-.88274	-6.7770	5.1205	-.39548	.30360	10.089	-.03550
#2	-3.9414	-2.2283	3.3269	-.46507	.35414	9.4334	-.03555
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	5.0000	10.000	50.000	50.000	50.000	200.00	1.0000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.38243	-.26814	.67462	5.1741	-37.635	-.16375	.00456
SDev	.96622	.24083	.97915	1.6972	5.036	2.21625	.02961
%RSD	252.65	89.818	145.14	32.801	13.381	1353.5	649.63
#1	-1.0657	-.09784	-.01774	6.3742	-41.196	-1.7309	-.01638
#2	.30079	-.43843	1.3670	3.9741	-34.074	1.4034	.02550
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	10.000	5.0000	10.000	50.000	250.00	200.00	5.0000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.9766	-98.299	.46615	1.4129	-2.2234	2.7918	-1.9685
SDev	.4092	101.655	.74067	.4248	1.8211	.0624	3.2256
%RSD	20.703	103.41	158.89	30.067	81.907	2.2368	163.86
#1	2.2660	-170.18	-.05758	1.1125	-.93567	2.7477	-4.2493
#2	1.6873	-26.418	.98988	1.7132	-3.5111	2.8360	.31235
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	.00000	.00000	.00000			.00000	
Range	20.000	1000.0	10.000			6.0000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.9931	47.498	-.85726	1.2724	-1.7194	1.0518	-1.9478
SDev	4.5456	5.082	.72779	.8514	.0822	.0495	.6185
%RSD	228.06	10.701	84.897	66.912	4.7782	4.7100	31.755
#1	5.2073	43.904	-.34264	.67038	-1.6613	1.0868	-2.3852
#2	-1.2210	51.092	-1.3719	1.8744	-1.7774	1.0168	-1.5105
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.00000	.00000	.00000	.00000	.00000	.00000
Range		200.00	20.000	20.000	10.000	10.000	20.000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	-33.272	-1.012	.6741
SDev	2.059	1.073	1.958
%RSD	6.1880	106.0	290.4
#1	-34.728	-.2534	2.058
#2	-31.816	-1.771	-.7102
Errors	QC Pass	QC Pass	QC Pass
Value	.00000	.0000	.0000
Range	50.000	5.000	10.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42562	--	--	--	--	--	--
SDev	75.66042	--	--	--	--	--	--
%RSD	.1777631	--	--	--	--	--	--
#1	42616	--	--	--	--	--	--
#2	42509	--	--	--	--	--	--

Method: PACE2006 Sample Name: crdl Operator:
Run Time: 06/15/10 16:05:33
Comment: 6010B
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	7.6183	Q3.8112	169.23	3.2012	9.0946	531.74	.70568
SDev	.1857	2.2115	2.36	.0006	.1259	9.01	.04946
%RSD	2.4370	58.027	1.3936	.01862	1.3845	1.6944	7.0088
#1	7.4871	5.3750	167.56	3.2008	9.0056	525.37	.67070
#2	7.7496	Q2.2474	170.89	3.2017	9.1837	538.11	.74065
Errors	QC Pass	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	10.000	10.000	150.00	3.0000	10.000	500.00	1.0000
Range	50.000	50.000	20.000	50.000	20.000	20.000	50.000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	18.977	18.112	10.837	105.91	4827.8	521.47	9.4008
SDev	.046	.729	.724	8.23	78.6	9.77	.1700
%RSD	.24162	4.0251	6.6849	7.7749	1.6271	1.8743	1.8080
#1	19.010	17.597	10.324	111.73	4772.3	514.55	9.2806
#2	18.945	18.628	11.349	100.08	4883.4	528.38	9.5210
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	20.000	20.000	10.000	100.00	5000.0	500.00	10.000
Range	20.000	20.000	50.000	50.000	20.000	20.000	20.000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	28.677	1588.0	34.915	3.5996	5.8515	6.3555	-.48758
SDev	.390	192.4	.493	1.1238	.4873	3.1350	.62599
%RSD	1.3589	12.117	1.4116	31.219	8.3278	49.327	128.39
#1	28.402	1452.0	34.567	4.3942	5.5069	Q4.1388	-.04494
#2	28.953	1724.1	35.264	2.8050	6.1960	8.5723	-.93023
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	30.000	2000.0	40.000			10.000	
Range	20.000	50.000	20.000			50.000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	15.599	40.194	Q91.736	26.183	31.958	42.798	18.030
SDev	8.839	1.341	.757	.382	.658	.918	.619
%RSD	56.663	3.3375	.82550	1.4585	2.0584	2.1460	3.4327
#1	9.3488	39.246	Q91.200	25.913	31.493	42.148	17.592
#2	21.849	41.143	Q92.271	26.453	32.423	43.447	18.468
Errors	NOCHECK	NOCHECK	QC Fail	QC Pass	QC Pass	QC Pass	QC Pass
Value			70.000	20.000	30.000	40.000	20.000
Range			20.000	50.000	20.000	20.000	50.000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	161.00	5.102	10.24
SDev	6.85	.049	5.69
%RSD	4.2533	.9624	55.53
#1	156.16	5.137	6.221
#2	165.84	5.067	14.26
Errors	QC Pass	QC Pass	QC Pass
Value	200.00	6.000	10.00
Range	50.000	50.00	50.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42875	--	--	--	--	--	--
SDev	543.0580	--	--	--	--	--	--
%RSD	1.266608	--	--	--	--	--	--
#1	43259	--	--	--	--	--	--
#2	42491	--	--	--	--	--	--

Method: PACE2006 Sample Name: 443904 Operator:
Run Time: 06/15/10 16:33:53
Comment: 6010B
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	432.82	1024.7	1440.9	1032.3	908.69	99051.	970.27
SDev	.16	.3	2.4	1.9	2.81	154.	2.13
%RSD	.03588	.03389	.16782	.18178	.30926	.15563	.22002
#1	432.93	1024.5	1439.2	1033.7	910.68	99160.	971.78
#2	432.71	1024.9	1442.7	1031.0	906.71	98942.	968.76
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	35000.	100000.	15000.	10000.	500000.	25000.
Low	1.2000	5.7000	2.8000	4.4000	.80000	14.300	.40000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	977.40	1003.4	971.32	10321.	13840.	36699.	1006.6
SDev	1.04	4.6	1.36	36.	58.	118.	1.4
%RSD	.10672	.45657	.13953	.35026	.41760	.32058	.14143
#1	978.13	1006.6	972.28	10346.	13881.	36782.	1007.6
#2	976.66	1000.2	970.36	10295.	13799.	36615.	1005.6
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	100000.	100000.	300000.	60000.	500000.	20000.
Low	.80000	.80000	1.3000	15.200	18.700	11.500	.30000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	975.87	100610.	1004.7	969.69	916.91	1058.7	1002.8
SDev	.12	733.	5.1	4.01	8.43	.2	3.7
%RSD	.01183	.72826	.50807	.41395	.91961	.01834	.36430
#1	975.79	101130.	1008.3	966.86	922.87	1058.8	1005.4
#2	975.95	100090.	1001.1	972.53	910.94	1058.5	1000.2
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK
High	40000.	200000.	100000.			40000.	
Low	2.1000	216.00	1.8000			4.9000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1000.1	9904.6	1327.0	1310.8	1076.7	987.51	954.14
SDev	4.7	17.7	6.2	4.2	1.9	.35	.27
%RSD	.47488	.17871	.46626	.31701	.17519	.03572	.02849
#1	1003.5	9917.1	1331.4	1313.7	1078.0	987.76	954.33
#2	996.77	9892.1	1322.7	1307.8	1075.4	987.26	953.95
Errors	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High		100000.	75000.	10000.	100000.	50000.	50000.
Low		20.000	6.4000	.60000	.60000	3.0000	9.0000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	9617.4	934.5	1001.
SDev	19.6	4.3	4.
%RSD	.20384	.4588	.4380
#1	9631.2	937.5	1004.
#2	9603.5	931.5	997.9
Errors	LC Pass	LC Pass	LC Pass
High	250000.	50000.	50000.
Low	26.500	2.800	6.700

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42234	--	--	--	--	--	--
SDev	168.9985	--	--	--	--	--	--
%RSD	.4001528	--	--	--	--	--	--
#1	42114	--	--	--	--	--	--
#2	42353	--	--	--	--	--	--

Method: PACE2006 Sample Name: 443905 Operator:
Run Time: 06/15/10 16:39:32
Comment: 6010B
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	436.03	1038.2	1423.7	1039.4	913.58	100270.	979.71
SDev	.51	.3	2.2	.5	1.11	25.	.19
%RSD	.11797	.02569	.15738	.04786	.12147	.02475	.01923
#1	435.67	1038.4	1422.1	1039.1	912.79	100280.	979.57
#2	436.40	1038.0	1425.3	1039.8	914.36	100250.	979.84
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	10000.	35000.	100000.	15000.	10000.	500000.	25000.
Low	1.2000	5.7000	2.8000	4.4000	.80000	14.300	.40000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	986.65	1012.8	975.68	10361.	14340.	37079.	1014.1
SDev	.69	.8	.37	21.	37.	8.	.2
%RSD	.07021	.07656	.03743	.19800	.25932	.02224	.02311
#1	987.14	1013.4	975.42	10375.	14367.	37085.	1014.2
#2	986.16	1012.3	975.94	10346.	14314.	37073.	1013.9
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	100000.	100000.	300000.	60000.	500000.	20000.
Low	.80000	.80000	1.3000	15.200	18.700	11.500	.30000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	981.67	102720.	1018.0	986.33	923.33	1048.1	1012.6
SDev	.02	49.	1.8	2.76	.10	3.4	1.5
%RSD	.00215	.04748	.17260	.28001	.01042	.32452	.14618
#1	981.69	102680.	1019.3	984.38	923.26	1050.5	1013.6
#2	981.66	102750.	1016.8	988.28	923.40	1045.7	1011.5
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Pass	NOCHECK
High	40000.	200000.	100000.			40000.	
Low	2.1000	216.00	1.8000			4.9000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1002.1	4216.4	1339.2	1320.3	1077.1	999.12	964.36
SDev	8.0	3.4	.9	.5	.9	1.47	1.18
%RSD	.79719	.08162	.06567	.03819	.08695	.14745	.12239
#1	996.40	4218.8	1339.8	1319.9	1077.8	998.08	963.53
#2	1007.7	4214.0	1338.6	1320.6	1076.5	1000.2	965.19
Errors	NOCHECK	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High		100000.	75000.	10000.	100000.	50000.	50000.
Low		20.000	6.4000	.60000	.60000	3.0000	9.0000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	9734.9	944.3	1006.
SDev	12.5	1.0	5.
%RSD	.12886	.1042	.4809
#1	9743.8	943.6	1002.
#2	9726.0	945.0	1009.
Errors	LC Pass	LC Pass	LC Pass
High	250000.	50000.	50000.
Low	26.500	2.800	6.700

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42360	--	--	--	--	--	--
SDev	36.76955	--	--	--	--	--	--
%RSD	.0868025	--	--	--	--	--	--
#1	42334	--	--	--	--	--	--
#2	42386	--	--	--	--	--	--

Method: PACE2006 Sample Name: icvccv Operator:
Run Time: 06/15/10 17:07:50
Comment: 6010B
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	469.71	1009.7	1083.9	1007.9	909.06	10593.	993.57
SDev	3.22	.2	1.4	2.6	3.02	33.	1.54
%RSD	.68512	.02364	.13091	.26089	.33190	.31602	.15511
#1	471.99	1009.9	1084.9	1009.7	911.19	10616.	994.66
#2	467.43	1009.6	1082.9	1006.0	906.92	10569.	992.48
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.00	1000.0	1000.0	1000.0	1000.0	10000.	1000.0
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1001.4	1025.2	993.14	10328.	10119.	10467.	1000.9
SDev	2.9	3.3	2.13	26.	.	24.	2.2
%RSD	.29326	.31941	.21426	.25445	.00215	.22746	.21919
#1	1003.5	1027.5	994.64	10346.	10119.	10484.	1002.5
#2	999.31	1022.9	991.63	10309.	10120.	10450.	999.36
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1000.0	1000.0	1000.0	10000.	10000.	10000.	1000.0
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	972.50	9631.1	943.21	1003.5	942.12	1050.0	1003.3
SDev	1.43	115.4	2.41	9.0	.86	4.0	23.7
%RSD	.14755	1.1980	.25521	.89226	.09142	.38441	2.3635
#1	973.51	9712.7	944.92	1009.9	942.73	1052.9	1020.0
#2	971.48	9549.5	941.51	997.20	941.52	1047.1	986.51
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	1000.0	10000.	1000.0			1000.0	
Range	10.000	10.000	10.000			10.000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	996.18	5388.8	Q1348.1	Q1321.0	1065.7	999.73	1001.7
SDev	4.23	17.3	2.2	4.7	3.4	.50	2.5
%RSD	.42442	.32035	.16483	.35240	.32220	.05012	.24492
#1	993.19	5401.0	Q1349.6	Q1324.3	1068.1	1000.1	1003.5
#2	999.17	5376.6	Q1346.5	Q1317.7	1063.2	999.37	1000.0
Errors	NOCHECK	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass
Value		5000.0	1000.0	1000.0	1000.0	1000.0	1000.0
Range		10.000	10.000	10.000	10.000	10.000	10.000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	9889.3	962.6	998.5
SDev	27.3	3.6	5.1
%RSD	.27562	.3694	.5083
#1	9908.6	965.1	1002.
#2	9870.0	960.1	995.0
Errors	QC Pass	QC Pass	QC Pass
Value	10000.	1000.	1000.
Range	10.000	10.00	10.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42473	--	--	--	--	--	--
SDev	152.7351	--	--	--	--	--	--
%RSD	.3596051	--	--	--	--	--	--
#1	42365	--	--	--	--	--	--
#2	42581	--	--	--	--	--	--

Method: PACE2006 Sample Name: icbccb Operator:
Run Time: 06/15/10 17:13:31
Comment: 6010B
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.1181	-5.5315	5.7938	-.35286	.31760	13.107	-.01205
SDev	.7559	2.4629	2.8081	.03855	.01135	1.387	.13375
%RSD	67.607	44.524	48.467	10.924	3.5746	10.584	1109.9
#1	-1.6527	-3.7900	7.7794	-.38012	.32563	14.088	-.10662
#2	-.58360	-7.2730	3.8082	-.32561	.30957	12.126	.08252
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	5.0000	10.000	50.000	50.000	50.000	200.00	1.0000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.03431	.30958	.84910	14.613	-22.592	3.4028	.14581
SDev	.02741	.23021	.74650	5.962	4.910	.3542	.04922
%RSD	79.906	74.362	87.916	40.804	21.732	10.409	33.759
#1	-.01492	.47236	1.3770	18.829	-26.064	3.6532	.18062
#2	-.05369	.14680	.32125	10.396	-19.121	3.1523	.11100
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	10.000	5.0000	10.000	50.000	250.00	200.00	5.0000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.3179	-124.30	-1.1951	2.4608	-2.7817	-3.4747	-1.9079
SDev	1.4115	102.49	.3611	2.2838	1.0512	1.0937	2.1233
%RSD	60.897	82.458	30.215	92.809	37.790	31.475	111.29
#1	3.3160	-196.77	-.93978	.84587	-3.5251	-2.7013	-3.4094
#2	1.3198	-51.824	-1.4505	4.0757	-2.0384	-4.2480	-.40651
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	.00000	.00000	.00000			.00000	
Range	20.000	1000.0	10.000			6.0000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3.7018	43.502	-1.5583	.70915	-.91493	.90274	.16148
SDev	2.0412	9.020	2.0936	.05591	.41510	.08352	1.4396
%RSD	55.140	20.734	134.35	7.8846	45.370	9.2523	891.53
#1	5.1452	49.880	-.07792	.66961	-.62141	.84368	1.1794
#2	2.2585	37.124	-3.0387	.74869	-1.2085	.96180	-.85648
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.00000	.00000	.00000	.00000	.00000	.00000
Range		200.00	20.000	20.000	10.000	10.000	20.000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	-45.432	-1.036	1.834
SDev	4.361	1.462	.654
%RSD	9.5982	141.1	35.68
#1	-48.515	-2.069	2.297
#2	-42.349	-.0022	1.371
Errors	QC Pass	QC Pass	QC Pass
Value	.00000	.0000	.0000
Range	50.000	5.000	10.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	41746	--	--	--	--	--	--
SDev	1292.591	--	--	--	--	--	--
%RSD	3.096324	--	--	--	--	--	--
#1	40832	--	--	--	--	--	--
#2	42660	--	--	--	--	--	--

Method: PACE2006 Sample Name: 5038203002 Operator:
Run Time: 06/16/10 08:56:03
Comment: 6010B
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	L-.46832	L-.00672	169.67	75.778	L.04370	59778.	L-.22976
SDev	.38985	.46733	.38	.816	.02164	559.	.03100
%RSD	83.243	6952.8	.22202	1.0764	49.519	.93432	13.493
#1	L-.19266	L.32373	169.41	76.355	L.02840	60173.	L-.25168
#2	L-.74399	L-.33717	169.94	75.201	L.05900	59383.	L-.20784
Errors	LC Low	LC Low	LC Pass	LC Pass	LC Low	LC Pass	LC Low
High	10000.	35000.	100000.	15000.	10000.	500000.	25000.
Low	1.2000	5.7000	2.8000	4.4000	.80000	14.300	.40000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	L.54442	3.5565	2.0010	20.368	6898.4	16314.	1.1154
SDev	.93039	1.7902	.5815	4.897	75.2	143.	.0588
%RSD	170.90	50.337	29.058	24.044	1.0894	.87452	5.2692
#1	L-.11347	2.2906	1.5899	23.830	6951.6	16415.	1.0739
#2	1.2023	4.8224	2.4122	16.905	6845.3	16214.	1.1570
Errors	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	100000.	100000.	300000.	60000.	500000.	20000.
Low	.80000	.80000	1.3000	15.200	18.700	11.500	.30000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	179.71	80534.	7.2015	-3.2860	2.4085	L-1.0785	-11.411
SDev	.37	789.	1.6518	3.5552	.7697	.8868	4.456
%RSD	.20843	.98018	22.936	108.19	31.957	82.231	39.050
#1	179.45	81092.	6.0335	-.77211	2.9527	L-1.7055	-8.2603
#2	179.98	79976.	8.3694	-5.7999	1.8642	L-.45138	-14.562
Errors	LC Pass	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Low	NOCHECK
High	40000.	200000.	100000.			40000.	
Low	2.1000	216.00	1.8000			4.9000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4.9152	4042.3	L1.2060	1.4163	L.51035	3.4273	L-1.0541
SDev	6.4845	49.0	2.7800	.0508	.59354	.0703	3.2200
%RSD	131.93	1.2111	230.52	3.5865	116.30	2.0503	305.46
#1	.32999	4076.9	L-.75979	1.3804	L.09065	3.4769	L-3.3310
#2	9.5004	4007.7	L3.1717	1.4522	.93005	3.3776	L1.2227
Errors	NOCHECK	LC Pass	LC Low	LC Pass	LC Low	LC Pass	LC Low
High		100000.	75000.	10000.	100000.	50000.	50000.
Low		20.000	6.4000	.60000	.60000	3.0000	9.0000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	L2.3674	L.5124	L-.5213
SDev	15.303	1.697	2.8413
%RSD	646.41	331.2	545.0
#1	L-8.4534	L1.713	L-2.530
#2	L13.188	L-.6877	L1.488
Errors	LC Low	LC Low	LC Low
High	250000.	50000.	50000.
Low	26.500	2.800	6.700

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42234	--	--	--	--	--	--
SDev	673.8727	--	--	--	--	--	--
%RSD	1.595588	--	--	--	--	--	--
#1	41757	--	--	--	--	--	--
#2	42710	--	--	--	--	--	--

Method: PACE2006 Sample Name: 5038203003 Operator:
Run Time: 06/16/10 09:01:43
Comment: 6010B
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	L-1.2189	L.14848	208.86	45.412	L.00634	112540.	L-.15815
SDev	.3107	1.6489	2.82	.342	.01566	85.	.05212
%RSD	25.489	1110.5	1.3520	.75374	247.10	.07523	32.954
#1	L-1.4386	L-1.0175	206.86	45.170	L-.00473	112600.	L-.19500
#2	L-.99923	L1.3145	210.86	45.654	L.01741	112480.	L-.12130
Errors	LC Low	LC Low	LC Pass	LC Pass	LC Low	LC Pass	LC Low
High	10000.	35000.	100000.	15000.	10000.	500000.	25000.
Low	1.2000	5.7000	2.8000	4.4000	.80000	14.300	.40000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	L.71610	L.66336	2.0270	29.594	2627.2	25437.	.91107
SDev	1.0997	.33069	1.2744	2.379	6.6	15.	.04670
%RSD	153.57	49.851	62.871	8.0397	.25097	.06031	5.1253
#1	1.4937	L.42952	L1.1259	27.912	2622.5	25448.	.87805
#2	L-.06152	.89719	2.9281	31.277	2631.8	25426.	.94408
Errors	LC Low	LC Low	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	100000.	100000.	300000.	60000.	500000.	20000.
Low	.80000	.80000	1.3000	15.200	18.700	11.500	.30000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	L-2.1631	63127.	4.6669	-4.6956	1.8536	L-.96091	-3.0586
SDev	.6041	18.	.9923	4.8100	1.5446	.69205	10.3402
%RSD	27.929	.02903	21.262	102.44	83.328	72.021	338.06
#1	L-1.7359	63140.	3.9652	-1.2944	.76143	L-1.4503	4.2530
#2	L-2.5903	63114.	5.3685	-8.0967	2.9458	L-.47155	-10.370
Errors	LC Low	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Low	NOCHECK
High	40000.	200000.	100000.			40000.	
Low	2.1000	216.00	1.8000			4.9000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	10.598	4638.7	L1.9517	L.57209	.61155	4.6537	L-.44852
SDev	.473	2.3	1.1724	.03188	.83812	.2102	.94542
%RSD	4.4629	.04905	60.069	5.5731	137.05	4.5163	210.79
#1	10.933	4637.1	L1.1227	L.59464	L.01891	4.5051	L-1.1170
#2	10.264	4640.3	L2.7807	L.54955	1.2042	4.8023	L.21999
Errors	NOCHECK	LC Pass	LC Low	LC Low	LC Pass	LC Pass	LC Low
High		100000.	75000.	10000.	100000.	50000.	50000.
Low		20.000	6.4000	.60000	.60000	3.0000	9.0000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	L6.2208	L-.3271	L6.051
SDev	4.6305	.5715	3.759
%RSD	74.435	174.7	62.12
#1	L2.9466	L.0770	8.708
#2	L9.4951	L-.7312	L3.393
Errors	LC Low	LC Low	LC Low
High	250000.	50000.	50000.
Low	26.500	2.800	6.700

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42354	--	--	--	--	--	--
SDev	61.51829	--	--	--	--	--	--
%RSD	.1452462	--	--	--	--	--	--
#1	42311	--	--	--	--	--	--
#2	42398	--	--	--	--	--	--

Method: PACE2006 Sample Name: 5038203004 Operator:
Run Time: 06/16/10 09:07:22
Comment: 6010B
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	L-1.9201	L-2.2351	203.24	44.739	L-.00859	111820.	L-.21352
SDev	2.8010	.4693	1.68	.611	.00423	510.	.10936
%RSD	145.88	20.997	.82531	1.3664	49.198	.45652	51.219
#1	L.06052	L-1.9033	204.42	45.171	L-.01158	112180.	L-.13619
#2	L-3.9007	L-2.5669	202.05	44.307	L-.00560	111460.	L-.29085
Errors	LC Low	LC Low	LC Pass	LC Pass	LC Low	LC Pass	LC Low
High	10000.	35000.	100000.	15000.	10000.	500000.	25000.
Low	1.2000	5.7000	2.8000	4.4000	.80000	14.300	.40000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	L.07562	L-.01953	L1.2141	22.342	2588.3	25208.	.79089
SDev	.68926	1.14297	.0260	18.534	13.4	182.	.01251
%RSD	911.45	5852.1	2.1447	82.958	.51848	.72109	1.5820
#1	L.56300	L.78867	L1.2325	35.448	2597.7	25337.	.78205
#2	L-.41176	L-.82773	L1.1957	L9.2361	2578.8	25080.	.79974
Errors	LC Low	LC Low	LC Low	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	100000.	100000.	300000.	60000.	500000.	20000.
Low	.80000	.80000	1.3000	15.200	18.700	11.500	.30000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	L-2.2419	62434.	2.2116	-4.7934	4.0463	L-2.2428	-4.9423
SDev	.0282	544.	.0213	3.0624	2.7303	3.5678	10.4190
%RSD	1.2585	.87181	.96155	63.887	67.477	159.08	210.81
#1	L-2.2618	62819.	2.2267	-6.9588	5.9769	L.28003	-12.310
#2	L-2.2219	62049.	2.1966	-2.6280	2.1156	L-4.7656	2.4250
Errors	LC Low	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Low	NOCHECK
High	40000.	200000.	100000.			40000.	
Low	2.1000	216.00	1.8000			4.9000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5.8341	4593.8	L-.23100	L.03830	L.13251	5.4442	L-2.0284
SDev	.2998	26.0	.45732	.05972	1.1798	.9988	1.8785
%RSD	5.1390	.56558	197.98	155.92	890.36	18.346	92.608
#1	6.0461	4612.2	L.09238	L.08053	.96676	6.1505	L-.70014
#2	5.6221	4575.5	L-.55437	L-.00393	L-.70174	4.7380	L-3.3567
Errors	NOCHECK	LC Pass	LC Low	LC Low	LC Low	LC Pass	LC Low
High		100000.	75000.	10000.	100000.	50000.	50000.
Low		20.000	6.4000	.60000	.60000	3.0000	9.0000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	L2.9730	L1.103	L2.246
SDev	.1989	.801	3.269
%RSD	6.6897	72.66	145.6
#1	L2.8324	L1.669	L-.0662
#2	L3.1136	L.5362	L4.558
Errors	LC Low	LC Low	LC Low
High	250000.	50000.	50000.
Low	26.500	2.800	6.700

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42304	--	--	--	--	--	--
SDev	382.5448	--	--	--	--	--	--
%RSD	.9042650	--	--	--	--	--	--
#1	42575	--	--	--	--	--	--
#2	42034	--	--	--	--	--	--

Method: PACE2006 Sample Name: 5038203005 Operator:
Run Time: 06/16/10 09:13:02
Comment: 6010B
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	L-.64959	L3.3151	300.92	73.274	L.00360	86535.	L-.24961
SDev	2.92514	.6187	.76	.139	.02095	163.	.05096
%RSD	450.31	18.663	.25421	.18956	581.98	.18868	20.414
#1	1.4188	L3.7526	300.38	73.372	L-.01121	86420.	L-.21358
#2	L-2.7180	L2.8776	301.46	73.175	L.01841	86651.	L-.28564
Errors	LC Low	LC Low	LC Pass	LC Pass	LC Low	LC Pass	LC Low
High	10000.	35000.	100000.	15000.	10000.	500000.	25000.
Low	1.2000	5.7000	2.8000	4.4000	.80000	14.300	.40000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.3757	1.9463	2.8802	95.633	3261.9	24788.	19.669
SDev	.0914	.1140	.0434	2.533	3.4	60.	.040
%RSD	3.8489	5.8578	1.5055	2.6483	.10371	.24038	.20349
#1	2.4404	2.0269	2.8495	97.424	3264.3	24746.	19.697
#2	2.3111	1.8657	2.9109	93.842	3259.5	24830.	19.640
Errors	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass	LC Pass
High	25000.	100000.	100000.	300000.	60000.	500000.	20000.
Low	.80000	.80000	1.3000	15.200	18.700	11.500	.30000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	L-7.3826	97885.	110.00	-6.1676	2.0806	L-.00782	-4.3913
SDev	.3011	106.	2.39	.9370	.2927	2.55549	1.4418
%RSD	4.0780	.10859	2.1682	15.193	14.070	32682.	32.833
#1	L-7.5955	97960.	111.69	-5.5050	2.2876	L-1.8148	-5.4108
#2	L-7.1697	97810.	108.32	-6.8301	1.8736	L1.7992	-3.3718
Errors	LC Low	LC Pass	LC Pass	NOCHECK	NOCHECK	LC Low	NOCHECK
High	40000.	200000.	100000.			40000.	
Low	2.1000	216.00	1.8000			4.9000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3.8402	5177.5	L.30750	1.1327	L.49247	3.9749	L-1.0976
SDev	1.7576	17.1	1.1540	.1179	.99503	.3259	.0899
%RSD	45.769	.32978	375.28	10.412	202.05	8.1988	8.1879
#1	2.5974	5165.4	L1.1235	1.2161	1.1961	4.2053	L-1.0341
#2	5.0831	5189.5	L-.50849	1.0493	L-.21112	3.7444	L-1.1612
Errors	NOCHECK	LC Pass	LC Low	LC Pass	LC Low	LC Pass	LC Low
High		100000.	75000.	10000.	100000.	50000.	50000.
Low		20.000	6.4000	.60000	.60000	3.0000	9.0000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	28.605	L-.6658	L1.099
SDev	5.616	.5073	1.653
%RSD	19.632	76.19	150.3
#1	L24.634	L-.3071	L-.0692
#2	32.576	L-1.025	L2.268

Errors	LC Pass	LC Low	LC Low
High	250000.	50000.	50000.
Low	26.500	2.800	6.700

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42786	--	--	--	--	--	--
SDev	79.90307	--	--	--	--	--	--
%RSD	.1867527	--	--	--	--	--	--
#1	42729	--	--	--	--	--	--
#2	42842	--	--	--	--	--	--

Method: PACE2006 Sample Name: 5038203006 Operator:
Run Time: 06/16/10 09:18:41
Comment: 6010B
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	L-.78433	L.97501	L1.8459	L-.64603	L.02461	75.182	L.10605
SDev	.33750	1.4393	1.6742	.24571	.00017	.655	.04029
%RSD	43.030	147.62	90.699	38.034	.70782	.87130	37.995
#1	L-.54569	L-.04271	3.0298	L-.81977	L.02448	75.646	L.13455
#2	L-1.0230	L1.9927	L.66206	L-.47228	L.02473	74.719	L.07756
Errors	LC Low	LC Low	LC Low	LC Low	LC Low	LC Pass	LC Low
High	10000.	35000.	100000.	15000.	10000.	500000.	25000.
Low	1.2000	5.7000	2.8000	4.4000	.80000	14.300	.40000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	L.53133	L.70877	2.0748	30.099	L7.1292	L10.667	.32267
SDev	.19145	.70968	.1262	1.683	2.0829	2.103	.04913
%RSD	36.033	100.13	6.0843	5.5918	29.217	19.719	15.227
#1	L.66671	L.20694	2.1641	28.909	L8.6020	L9.1793	.35741
#2	L.39595	1.2106	1.9855	31.289	L5.6563	12.154	L.28793
Errors	LC Low	LC Low	LC Pass	LC Pass	LC Low	LC Low	LC Pass
High	25000.	100000.	100000.	300000.	60000.	500000.	20000.
Low	.80000	.80000	1.3000	15.200	18.700	11.500	.30000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	L1.3270	387.15	L.27739	-3.1469	1.2082	6.7528	-3.7100
SDev	.8090	27.60	.10558	1.1771	2.6784	1.5331	3.9305
%RSD	60.968	7.1296	38.064	37.405	221.69	22.702	105.94
#1	L1.8991	367.63	L.35205	-2.3146	-.68576	5.6688	-.93079
#2	L.75491	406.67	L.20273	-3.9793	3.1021	7.8368	-6.4893
Errors	LC Low	LC Pass	LC Low	NOCHECK	NOCHECK	LC Pass	NOCHECK
High	40000.	200000.	100000.			40000.	
Low	2.1000	216.00	1.8000			4.9000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3.5410	39.054	L1.7231	1.3131	.84644	L2.6703	L-.31422
SDev	3.8599	.169	1.1377	.2328	.00080	.7376	2.48685
%RSD	109.01	.43265	66.028	17.726	.09427	27.624	791.43
#1	.81165	39.173	L2.5276	1.4776	.84701	L2.1487	L-2.0727
#2	6.2704	38.934	L.91862	1.1485	.84588	3.1919	L1.4442
Errors	NOCHECK	LC Pass	LC Low	LC Pass	LC Pass	LC Low	LC Low
High		100000.	75000.	10000.	100000.	50000.	50000.
Low		20.000	6.4000	.60000	.60000	3.0000	9.0000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	L1.1178	L-.2419	L1.127
SDev	.7693	1.3945	1.266
%RSD	68.826	576.5	112.4
#1	L.57380	L-1.228	L.2316
#2	L1.6618	L.7442	L2.022
Errors	LC Low	LC Low	LC Low
High	250000.	50000.	50000.
Low	26.500	2.800	6.700

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	43749	--	--	--	--	--	--
SDev	219.2031	--	--	--	--	--	--
%RSD	.5010471	--	--	--	--	--	--
#1	43594	--	--	--	--	--	--
#2	43904	--	--	--	--	--	--

Method: PACE2006 Sample Name: icvccv Operator:
Run Time: 06/16/10 09:24:21
Comment: 6010B
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	482.22	1024.1	967.56	1030.7	1019.0	10450.	1003.9
SDev	.54	3.8	3.11	.4	.7	1.	.6
%RSD	.11236	.36728	.32139	.04257	.06827	.01086	.05544
#1	481.84	1021.5	965.36	1030.4	1019.5	10451.	1004.3
#2	482.60	1026.8	969.76	1031.1	1018.5	10450.	1003.5
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	500.00	1000.0	1000.0	1000.0	1000.0	10000.	1000.0
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1000.6	1025.2	969.56	10435.	10567.	10074.	1010.9
SDev	1.5	.2	.60	3.	13.	4.	.2
%RSD	.15228	.01520	.06198	.02462	.11880	.03569	.02269
#1	1001.7	1025.3	969.99	10433.	10575.	10071.	1010.8
#2	999.54	1025.1	969.14	10437.	10558.	10076.	1011.1
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	1000.0	1000.0	1000.0	10000.	10000.	10000.	1000.0
Range	10.000	10.000	10.000	10.000	10.000	10.000	10.000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1003.2	Q11020.	1028.6	1025.4	1009.7	1057.8	1030.6
SDev	2.3	173.	4.3	1.2	4.5	.1	5.2
%RSD	.23133	1.5697	.41721	.11473	.44833	.01003	.50602
#1	1004.8	10898.	1031.7	1024.6	1012.9	1057.8	1026.9
#2	1001.6	Q11143.	1025.6	1026.2	1006.5	1057.7	1034.3
Errors	QC Pass	QC Fail	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	1000.0	10000.	1000.0			1000.0	
Range	10.000	10.000	10.000			10.000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1013.9	5222.9	Q1362.8	Q1355.9	1033.9	1009.8	978.15
SDev	5.6	1.8	2.0	.7	.0	1.9	.68
%RSD	.54993	.03353	.14589	.05452	.00287	.19235	.06963
#1	1017.9	5221.7	Q1364.2	Q1356.4	1033.9	1008.4	978.63
#2	1010.0	5224.2	Q1361.3	Q1355.3	1033.9	1011.2	977.67
Errors	NOCHECK	QC Pass	QC Fail	QC Fail	QC Pass	QC Pass	QC Pass
Value		5000.0	1000.0	1000.0	1000.0	1000.0	1000.0
Range		10.000	10.000	10.000	10.000	10.000	10.000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	10276.	1015.	1019.
SDev	9.	3.	2.
%RSD	.08592	.2589	.1945
#1	10282.	1017.	1021.
#2	10269.	1013.	1018.
Errors	QC Pass	QC Pass	QC Pass
Value	10000.	1000.	1000.
Range	10.000	10.00	10.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42973	--	--	--	--	--	--
SDev	5.656854	--	--	--	--	--	--
%RSD	.0131637	--	--	--	--	--	--
#1	42977	--	--	--	--	--	--
#2	42969	--	--	--	--	--	--

Method: PACE2006 Sample Name: icbccb Operator:
Run Time: 06/16/10 09:30:03
Comment: 6010B
Mode: CONC Corr. Factor: 1

Elem	Ag3280	As1890	B_2496	Ba4934	Be3130	Ca3158	Cd2265
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.9440	1.0071	3.9092	-.59976	.05264	8.2619	.16669
SDev	.0560	.8455	.4801	.10436	.02100	1.6018	.02609
%RSD	2.8784	83.952	12.281	17.400	39.889	19.387	15.650
#1	-1.9836	.40926	3.5697	-.52597	.03779	9.3945	.14824
#2	-1.9044	1.6050	4.2486	-.67355	.06748	7.1293	.18513
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	5.0000	10.000	50.000	50.000	50.000	200.00	1.0000

Elem	Co2286	Cr2677	Cu3247	Fe2714	K_7664	Mg2790	Mn2576
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.0753	1.1165	2.0024	32.017	33.311	6.7589	.30514
SDev	.3438	.2464	.0996	6.439	11.095	1.5242	.01732
%RSD	31.968	22.069	4.9745	20.112	33.308	22.550	5.6756
#1	.83224	.94223	1.9319	27.463	41.157	7.8366	.31739
#2	1.3184	1.2907	2.0728	36.570	25.466	5.6811	.29290
Errors	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value	.00000	.00000	.00000	.00000	.00000	.00000	.00000
Range	10.000	5.0000	10.000	50.000	250.00	200.00	5.0000

Elem	Mo2020	Na3302	Ni2316	2203/1	2203/2	Sb2068	1960/1
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.97453	343.62	-.62848	-3.5714	.74395	2.9170	-10.406
SDev	.10761	50.20	1.05567	.6289	.81521	4.5803	6.787
%RSD	11.042	14.609	167.97	17.608	109.58	157.02	65.226
#1	.89844	379.12	.11799	-3.1267	.16751	-.32181	-15.206
#2	1.0506	308.13	-1.3750	-4.0161	1.3204	Q6.1557	-5.6067
Errors	QC Pass	QC Pass	QC Pass	NOCHECK	NOCHECK	QC Pass	NOCHECK
Value	.00000	.00000	.00000			.00000	
Range	20.000	1000.0	10.000			6.0000	

Elem	1960/2	Si2881	Sn1899	Ti3372	V_2924	Zn2062	Tl1908
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb
Avge	9.9837	32.038	2.8510	1.4898	.96612	.33024	1.3783
SDev	1.8795	1.887	4.7782	.3908	.16694	.73050	.5777
%RSD	18.826	5.8911	167.60	26.229	17.280	221.21	41.913
#1	11.313	33.373	-.52766	1.7662	1.0842	-.18631	.96979
#2	8.6547	30.703	6.2297	1.2135	.84808	.84678	1.7867
Errors	NOCHECK	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass	QC Pass
Value		.00000	.00000	.00000	.00000	.00000	.00000
Range		200.00	20.000	20.000	10.000	10.000	20.000

Elem	Al3082	Pb2203	Se1960

Units	ppb	ppb	ppb
Avge	-47.279	-.6929	3.194
SDev	7.739	.3343	1.007
%RSD	16.368	48.25	31.51
#1	Q-52.751	-.9293	2.482
#2	-41.807	-.4565	3.906
Errors	QC Pass	QC Pass	QC Pass
Value	.00000	.0000	.0000
Range	50.000	5.000	10.00

IntStd	1	2	3	4	5	6	7
Mode	*Counts	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED	NOTUSED
Elem	Y	--	--	--	--	--	--
Wavlen	371.030	--	--	--	--	--	--
Avge	42854	--	--	--	--	--	--
SDev	263.7508	--	--	--	--	--	--
%RSD	.6154709	--	--	--	--	--	--
#1	42667	--	--	--	--	--	--
#2	43040	--	--	--	--	--	--

Pace Analytical

Dissolved
Mercury- liquids 7470A

Project Number 5038203 Arcadis

Initials/ Date Compiled RAK 6-16-10

All prep and analytical information is included in one section:

**** Sample Preparation and Analysis Logs***
**** Initial Calibration Data***
**** Calibration Verification Data***
**** Laboratory Control Samples (LCS)***
**** Matrix Spike and Spike Duplicate Samples (MS/MSD)***
**** Method Blanks***
**** Client Sample Raw Data***

Form F-IN-Q163-rev.0, 24Jul2007

Mercury Analysis Log

PASI INDY Laboratory

Cal/ Spike Sol. #: 21985 | Time In 6:13 PM | Bath Temp(C): 95/3 | Page Number: 1902

ICV Sol.#: 22037 | Time Out: 8:13 PM | Monday, June 14, 2010

Aqua Regia:	0	Stannous Chloride	0
Hydroxylamine Hydrochloride:	0	Hg Carrier solution:	
Potassium Permanganate:	3030	Potassium Persulfate:	8764
Stannous Chloride:	0		

Daily Working Std and Digested CAL Std's Prepared Per SOP# IN-I-040-rev.9

Analyst	sample ID	calc avg	client	absorbance	date/time	QC batch	(g or mL) initial wt/vol	(mL) final vol	project #	QC/Comments
RAK	5038471001		Arcadis U.S._ Inc.		6/14/2010	2665	30	30	5038471	
RAK	444762		In-house QC Account		6/14/2010	2664	30	30		
RAK	5038334005		August Mack_ Ohio		6/14/2010	2665	30	30	5038334	
RAK	5038334006		August Mack_ Ohio		6/14/2010	2665	30	30	5038334	
RAK	5038334007		August Mack_ Ohio		6/14/2010	2665	30	30	5038334	
RAK	5038334008		August Mack_ Ohio		6/14/2010	2665	30	30	5038334	
RAK	5038334009		August Mack_ Ohio		6/14/2010	2665	30	30	5038334	
RAK	5038334010		August Mack_ Ohio		6/14/2010	2665	30	30	5038334	
RAK	5038334011		August Mack_ Ohio		6/14/2010	2665	30	30	5038334	
RAK	5038334012		August Mack_ Ohio		6/14/2010	2665	30	30	5038334	
RAK	5038334003		August Mack_ Ohio		6/14/2010	2665	30	30	5038334	
RAK	5038334014		August Mack_ Ohio		6/14/2010	2665	30	30	5038334	
RAK	5038334002		August Mack_ Ohio		6/14/2010	2665	30	30	5038334	
RAK	444759		In-house QC Account		6/14/2010	2664	30	30		
RAK	444760		In-house QC Account		6/14/2010	2664	30	30		
RAK	5038203001		Arcadis U.S._ Inc.		6/14/2010	2664	30	30	5038203	
RAK	5038203002		Arcadis U.S._ Inc.		6/14/2010	2664	30	30	5038203	
RAK	5038203003		Arcadis U.S._ Inc.		6/14/2010	2664	30	30	5038203	
RAK	5038203004		Arcadis U.S._ Inc.		6/14/2010	2664	30	30	5038203	
RAK	5038203005		Arcadis U.S._ Inc.		6/14/2010	2664	30	30	5038203	
RAK	444761		In-house QC Account		6/14/2010	2664	30	30		
RAK	5038334013		August Mack_ Ohio		6/14/2010	2665	30	30	5038334	
RAK	5038310007		ATC Associates		6/14/2010	2664	30	30	5038310	
RAK	5038200007		TesTech Inc.		6/14/2010	2664	30	30	5038200	
RAK	5038388007		URS OH- Cincy		6/14/2010	2664	30	30	5038388	
RAK	5038388008		URS OH- Cincy		6/14/2010	2664	30	30	5038388	
RAK	5038310001		ATC Associates		6/14/2010	2664	30	30	5038310	
RAK	5038310002		ATC Associates		6/14/2010	2664	30	30	5038310	
RAK	5038310003		ATC Associates		6/14/2010	2664	30	30	5038310	
RAK	444763		In-house QC Account		6/14/2010	2664	30	30		
RAK	444764		In-house QC Account		6/14/2010	2664	30	30		
RAK	5038310004		ATC Associates		6/14/2010	2664	30	30	5038310	
RAK	5038334004		August Mack_ Ohio		6/14/2010	2665	30	30	5038334	
RAK	5038310006		ATC Associates		6/14/2010	2664	30	30	5038310	
RAK	5038203006		Arcadis U.S._ Inc.		6/14/2010	2664	30	30	5038203	

Reviewed By: RAK Review Date: Tuesday, June 15, 2010

Mercury Analysis Log

PASI - INDY Laboratory

Cal/ Spike Sol. #: 21985 | Time In: 6:13 PM | Bath Temp(C): 95/3 | Page Number: 1903

ICV Sol.#: 22037 | Time Out: 8:13 PM | Tuesday, June 15, 2010

Aqua Regia:	0	Stannous Chloride	8917	
Hydroxylamine Hydrochloride:	8877	Hg Carrier solution:	8916	Daily Working Std and Digested CAL Std's Prepared Per SOP# IN-I-040-rev.9
Potassium Permanganate:	3030	Potassium Persulfate:	8764	
Stannous Chloride:	8917			

Analyst	sample ID	calc avg	client	absorbance	date/time	QC batch	(g or mL) initial wt/vol	(mL) final vol	project #	QC/Comments
RAK	Calib Blank			0.00245475	6/15/2010 10:17:05 AM					
RAK	0.2			0.01800098	6/15/2010 10:18:27 AM					
RAK	1			0.09038662	6/15/2010 10:19:50 AM					
RAK	2			0.18288433	6/15/2010 10:21:14 AM					
RAK	5			0.45321548	6/15/2010 10:22:40 AM					
RAK	7.5			0.67288565	6/15/2010 10:24:06 AM					
RAK	10			0.8927986	6/15/2010 10:25:33 AM					
RAK	ICV	5.10158355		0.45787891	6/15/2010 10:27:05 AM					
RAK	ICB	-0.0224367		-0.0002032	6/15/2010 10:28:30 AM					
RAK	RLVS	2.04059262		0.18422946	6/15/2010 10:29:52 AM					
RAK	444759	-0.0264373	In-house QC Account	-0.0005608	6/15/2010 10:31:16 AM					
RAK	444760	5.13556692	In-house QC Account	0.46091699	6/15/2010 10:32:38 AM					
RAK	5038203001	0.0263552	Arcadis U.S._ Inc.	0.0041587	6/15/2010 10:34:00 AM				5038203	
RAK	5038203002	0.00806598	Arcadis U.S._ Inc.	0.00252366	6/15/2010 10:35:23 AM				5038203	
RAK	5038203003	0.01341055	Arcadis U.S._ Inc.	0.00300146	6/15/2010 10:36:48 AM				5038203	
RAK	5038203004	-0.0003316	Arcadis U.S._ Inc.	0.00177292	6/15/2010 10:38:13 AM				5038203	
RAK	5038203005	0.02164563	Arcadis U.S._ Inc.	0.00373766	6/15/2010 10:39:39 AM				5038203	
RAK	444761	4.95316261	In-house QC Account	0.44461023	6/15/2010 10:41:06 AM					
RAK	444762	4.96712153	In-house QC Account	0.44585815	6/15/2010 10:42:32 AM					
RAK	5038203006	-0.0235445	Arcadis U.S._ Inc.	-0.0003022	6/15/2010 10:43:52 AM				5038203	
RAK	CCV	5.06816723		0.45489153	6/15/2010 10:45:15 AM					
RAK	CCB	-0.033892		-0.0012273	6/15/2010 10:46:38 AM					
RAK	5038200007	-0.0259871	TesTech Inc.	-0.0005206	6/15/2010 10:47:59 AM				5038200	
RAK	5038388007	-0.0275464	URS OH- Cincy	-0.00066	6/15/2010 10:49:21 AM				5038388	
RAK	5038388008	-0.039305	URS OH- Cincy	-0.0017112	6/15/2010 10:50:43 AM				5038388	
RAK	5038310001	-0.0197332	ATC Associates	0.00003843	6/15/2010 10:52:06 AM				5038310	
RAK	5038310002	-0.0337536	ATC Associates	-0.0012149	6/15/2010 10:53:29 AM				5038310	
RAK	5038310003	-0.0274765	ATC Associates	-0.0006538	6/15/2010 10:54:53 AM				5038310	
RAK	444763	4.88418845	In-house QC Account	0.43844401	6/15/2010 10:56:17 AM					
RAK	444764	4.91135421	In-house QC Account	0.44087261	6/15/2010 10:57:41 AM					
RAK	5038310004	-0.0384657	ATC Associates	-0.0016362	6/15/2010 10:59:06 AM				5038310	
RAK	5038310005	-0.035316	ATC Associates	-0.0013546	6/15/2010 11:00:31 AM				5038310	
RAK	CCV	5.01335766		0.44999161	6/15/2010 11:01:56 AM					
RAK	CCB	-0.0307113		-0.0009429	6/15/2010 11:03:19 AM					
RAK	5038310006	-0.0297768	ATC Associates	-0.0008594	6/15/2010 11:04:42 AM				5038310	

Reviewed By: RAK Review Date: Tuesday, June 15, 2010

Mercury Analysis Log

PASI INDY Laboratory

Cal/ Spike Sol. #: 21985 Time In: 6:13 PM Bath Temp(C): 95/3 Page Number: 1903

ICV Sol.#: 22037 Time Out: 8:13 PM Tuesday, June 15, 2010

Aqua Regia:	0	Stannous Chloride	8917
Hydroxylamine Hydrochloride:	8877	Hg Carrier solution:	8916
Potassium Permanganate:	3030	Potassium Persulfate:	8764
Stannous Chloride:	8917		

Daily Working Std and Digested CAL Std's Prepared Per SOP# IN-I-040-rev.9

Analyst	sample ID	calc avg	client	absorbance	date/time	QC batch	(g or mL) initial wt/vol	(mL) final vol	project #	QC/Comments
RAK	5038310007	-0.0238229	ATC Associates	-0.0003271	6/15/2010 11:06:09 AM				5038310	
RAK	5038310008	-0.0226821	ATC Associates	-0.0002251	6/15/2010 11:07:36 AM				5038310	
RAK	5038469003	-0.0315799	TesTech Inc.	-0.0010206	6/15/2010 11:09:00 AM				5038469	
RAK	444765	-0.0183459	In-house QC Account	0.00016246	6/15/2010 11:10:20 AM					
RAK	444766	5.27221746	In-house QC Account	0.47313341	6/15/2010 11:11:40 AM					
RAK	5038459004	0.6736282	August Mack_ Ohio	0.06202424	6/15/2010 11:13:01 AM				5038459	
RAK	5038334001	-0.0130127	August Mack_ Ohio	0.00063924	6/15/2010 11:14:22 AM				5038334	
RAK	444767	4.93526601	In-house QC Account	0.4430103	6/15/2010 11:15:44 AM					
RAK	444768	4.94851186	In-house QC Account	0.44419446	6/15/2010 11:17:07 AM					
RAK	CCV	5.03016716		0.45149436	6/15/2010 11:18:31 AM					
RAK	CCB	-0.0230415		-0.0002573	6/15/2010 11:19:54 AM					
RAK	5038334002	-0.0126824	August Mack_ Ohio	0.00066877	6/15/2010 11:21:16 AM				5038334	
RAK	5038334003	-0.0290164	August Mack_ Ohio	-0.0007914	6/15/2010 11:22:39 AM				5038334	
RAK	5038334004	-0.0255735	August Mack_ Ohio	-0.0004836	6/15/2010 11:24:03 AM				5038334	
RAK	5038334005	-0.0213706	August Mack_ Ohio	-0.0001079	6/15/2010 11:25:27 AM				5038334	
RAK	5038334006	-0.0147414	August Mack_ Ohio	0.0004847	6/15/2010 11:26:51 AM				5038334	
RAK	5038334007	0.02833451	August Mack_ Ohio	0.00433564	6/15/2010 11:28:18 AM				5038334	
RAK	5038334008	-0.015312	August Mack_ Ohio	0.00043369	6/15/2010 11:29:45 AM				5038334	
RAK	5038334009	-0.020093	August Mack_ Ohio	0.00000627	6/15/2010 11:31:12 AM				5038334	
RAK	5038334010	-0.0202907	August Mack_ Ohio	-0.0000113	6/15/2010 11:32:40 AM				5038334	
RAK	5038334011	-0.015535	August Mack_ Ohio	0.00041375	6/15/2010 11:34:04 AM				5038334	
RAK	CCV	5.04869849		0.45315104	6/15/2010 11:35:26 AM					
RAK	CCB	-0.0233401		-0.000284	6/15/2010 11:36:49 AM					
RAK	5038334012	-0.0124201	August Mack_ Ohio	0.00069222	6/15/2010 11:38:09 AM				5038334	
RAK	5038334013	-0.0266654	August Mack_ Ohio	-0.0005812	6/15/2010 11:39:30 AM				5038334	
RAK	5038334014	-0.0170122	August Mack_ Ohio	0.00028169	6/15/2010 11:40:51 AM				5038334	
RAK	5038471001	-0.0210922	Arcadis U.S._ Inc.	-0.000083	6/15/2010 11:42:12 AM				5038471	
RAK	CCV	5.03208067		0.45166543	6/15/2010 11:43:35 AM					
RAK	CCB	-0.0238536		-0.0003299	6/15/2010 11:44:59 AM					
RAK	RLVS	2.04938491		0.18501548	6/15/2010 11:46:21 AM					

Reviewed By: RAK Review Date: Tuesday, June 15, 2010

Autosampler Loading List

Sample Information File: 061510HG.SIF
Methods: Pace Hg

Location	Elements	Solution
0	Hg	Wash Solution
1	Hg	Calib Blank
	Hg	ICB: 0.0000 µg/L
	Hg	CCB: 0.0000 µg/L
2	Hg	S0.2: 0.2 µg/L
3	Hg	S1.0: 1.0 µg/L
4	Hg	S2.0: 2.0 µg/L
	Hg	RLVS: 2.0000 µg/L
5	Hg	S5.0: 5.0 µg/L
	Hg	CCV: 5.0000 µg/L
6	Hg	S7.5: 7.5 µg/L
7	Hg	S10.0: 10.0 µg/L
8	Hg	ICV: 5.0000 µg/L
9	Hg	Sample: 444759_B2632Dx1
10	Hg	Sample: 444760_B2632Dx1
11	Hg	Sample: 5038203001_B2632Dx1
12	Hg	Sample: 5038203002_B2632Dx1
13	Hg	Sample: 5038203003_B2632Dx1
14	Hg	Sample: 5038203004_B2632Dx1
15	Hg	Sample: 5038203005_B2632Dx1
16	Hg	Sample: 444761_B2632Dx1
17	Hg	Sample: 444762_B2632Dx1
18	Hg	Sample: 5038203006_B2632Dx1
19	Hg	Sample: 5038200007_B2632Dx1
20	Hg	Sample: 5038388007_B2632Dx1
21	Hg	Sample: 5038388008_B2632Dx1
22	Hg	Sample: 5038310001_B2632Dx1
23	Hg	Sample: 5038310002_B2632Dx1
24	Hg	Sample: 5038310003_B2632Dx1
25	Hg	Sample: 444763_B2632Dx1
26	Hg	Sample: 444764_B2632Dx1
27	Hg	Sample: 5038310004_B2632Dx1
28	Hg	Sample: 5038310005_B2632Dx1
29	Hg	Sample: 5038310006_B2632Dx1
30	Hg	Sample: 5038310007_B2632Dx1
31	Hg	Sample: 5038310008_B2632Dx1
32	Hg	Sample: 5038469003_B2632Dx1
33	Hg	Sample: 444765_B2633Dx1
34	Hg	Sample: 444766_B2633Dx1
35	Hg	Sample: 5038459004_B2633Dx1
36	Hg	Sample: 5038334001_B2633Dx1
37	Hg	Sample: 444767_B2633Dx1
38	Hg	Sample: 444768_B2633Dx1
39	Hg	Sample: 5038334002_B2633Dx1
40	Hg	Sample: 5038334003_B2633Dx1
41	Hg	Sample: 5038334004_B2633Dx1
42	Hg	Sample: 5038334005_B2633Dx1
43	Hg	Sample: 5038334006_B2633Dx1
44	Hg	Sample: 5038334007_B2633Dx1
45	Hg	Sample: 5038334008_B2633Dx1
46	Hg	Sample: 5038334009_B2633Dx1
47	Hg	Sample: 5038334010_B2633Dx1
48	Hg	Sample: 5038334011_B2633Dx1
49	Hg	Sample: 5038334012_B2633Dx1
50	Hg	Sample: 5038334013_B2633Dx1
51	Hg	Sample: 5038334014_B2633Dx1
52	Hg	Sample: 5038471001_B2633Dx1

Method Name: Pace Hg
Method Description: Pace Hg
Element: Hg

Date: 06/15/2010
Technique:FI-MHS
Calibration Type:
Hg, Calc. Intercept : Linear
Wavelength: 253.7 nm
Sample Info Name: 061510HG.SIF Results Data Set Name: 061510hg

Element: Hg Seq. No.: 2 AS Loc.: 1 Date: 06/15/2010
Sample ID: Calib Blank

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1			0.0025	0.0025	10:17:05	No

Auto-zero performed.

Element: Hg Seq. No.: 3 AS Loc.: 2 Date: 06/15/2010
Sample ID: S0.2

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1			0.0180	0.0205	10:18:27	No

[Hg] Standard number 1 applied. [0.200]
Correlation Coefficient: 1.00000 Slope: 0.09000
Intercept : 0.00000

Element: Hg Seq. No.: 4 AS Loc.: 3 Date: 06/15/2010
Sample ID: S1.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1			0.0904	0.0928	10:19:50	No

[Hg] Standard number 2 applied. [1.000]
Correlation Coefficient: 1.00000 Slope: 0.09041
Intercept : -0.00004

Element: Hg Seq. No.: 5 AS Loc.: 4 Date: 06/15/2010
Sample ID: S2.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1			0.1829	0.1853	10:21:14	No

[Hg] Standard number 3 applied. [2.000]
Correlation Coefficient: 0.99998 Slope: 0.09143
Intercept : -0.00032

Element: Hg Seq. No.: 6 AS Loc.: 5 Date: 06/15/2010
Sample ID: S5.0

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1			0.4532	0.4557	10:22:40	No

[Hg] Standard number 4 applied. [5.000]
Correlation Coefficient: 0.99999 Slope: 0.09070
Intercept : 0.00015

Element: Hg Seq. No.: 7 AS Loc.: 6 Date: 06/15/2010
Sample ID: S7.5

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1			0.6729	0.6753	10:24:06	No

[Hg] Standard number 5 applied. [7.500]
Correlation Coefficient: 0.99997 Slope: 0.08989
Intercept : 0.00102

Element: Hg Seq. No.: 8 AS Loc.: 7 Date: 06/15/2010
Sample ID: S10.0

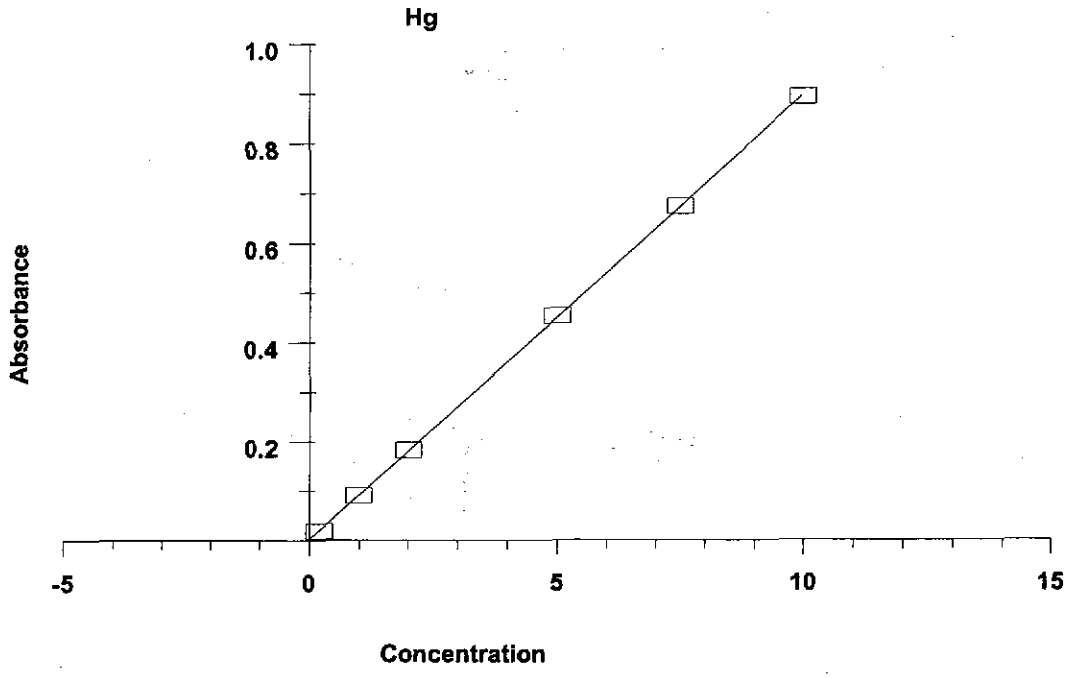
Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1			0.8928	0.8953	10:25:33	No

[Hg] Standard number 6 applied. [10.00]
Correlation Coefficient: 0.99997 Slope: 0.08940
Intercept : 0.00180

Calibration data for Hg

Standard ID	Mean Signal (Pk Area)	Entered Concentration (µg/L)	Calculated Concentration (µg/L)	Standard Deviation	%RSD
Calib Blank	0.0025	---	----	----	----
S0.2	0.0180	0.200	0.181	----	----
S1.0	0.0904	1.000	0.991	----	----
S2.0	0.1829	2.000	2.026	----	----
S5.0	0.4532	5.000	5.049	----	----
S7.5	0.6729	7.500	7.507	----	----
S10.0	0.8928	10.000	9.967	----	----
Calib Blank	0.0025	---	----	----	----

Correlation Coefficient: 0.99997 Slope: 0.08940 Intercept: 0.0018



Element: Hg Seq. No.: 9 AS Loc.: 8 Date: 06/15/2010
Sample ID: ICV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	5.102	5.102	0.4579	0.4603	1 10:27:05	No

QC value within specified limits.

Element: Hg Seq. No.: 10 AS Loc.: 1 Date: 06/15/2010
Sample ID: ICB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	-0.022	-0.022	-0.0002	0.0023	1 10:28:30	No

QC value within specified limits.

Element: Hg Seq. No.: 11 AS Loc.: 4 Date: 06/15/2010
Sample ID: RLVS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	2.041	2.041	0.1842	0.1867	1 10:29:52	No

QC value within specified limits.

Element: Hg Seq. No.: 12 AS Loc.: 9 Date: 06/15/2010
Sample ID: 444759_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	-0.026	-0.026	-0.0006	0.0019	1 10:31:16	No

Element: Hg Seq. No.: 13 AS Loc.: 10 Date: 06/15/2010
Sample ID: 444760_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	5.136	5.136	0.4609	0.4634	1 10:32:38	No

Element: Hg Seq. No.: 14 AS Loc.: 11 Date: 06/15/2010
Sample ID: 5038203001_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	0.026	0.026	0.0042	0.0066	1 10:34:00	No

Element: Hg Seq. No.: 15 AS Loc.: 12 Date: 06/15/2010
Sample ID: 5038203002_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	0.008	0.008	0.0025	0.0050	1 10:35:23	No

Element: Hg Seq. No.: 16 AS Loc.: 13 Date: 06/15/2010
Sample ID: 5038203003_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	0.013	0.013	0.0030	0.0055	1 10:36:48	No

Element: Hg Seq. No.: 17 AS Loc.: 14 Date: 06/15/2010
Sample ID: 5038203004_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	0.000	0.000	0.0018	0.0042	1	10:38:13	No

Element: Hg Seq. No.: 18 AS Loc.: 15 Date: 06/15/2010
Sample ID: 5038203005_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	0.022	0.022	0.0037	0.0062	1	10:39:39	No

Element: Hg Seq. No.: 19 AS Loc.: 16 Date: 06/15/2010
Sample ID: 444761_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	4.953	4.953	0.4446	0.4471	1	10:41:06	No

Element: Hg Seq. No.: 20 AS Loc.: 17 Date: 06/15/2010
Sample ID: 444762_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	4.967	4.967	0.4459	0.4483	1	10:42:32	No

Element: Hg Seq. No.: 21 AS Loc.: 18 Date: 06/15/2010
Sample ID: 5038203006_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	-0.024	-0.024	-0.0003	0.0022	1	10:43:52	No

Element: Hg Seq. No.: 22 AS Loc.: 5 Date: 06/15/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	5.068	5.068	0.4549	0.4573	1	10:45:15	No

QC value within specified limits.

Element: Hg Seq. No.: 23 AS Loc.: 1 Date: 06/15/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	-0.034	-0.034	-0.0012	0.0012	1	10:46:38	No

QC value within specified limits.

Element: Hg Seq. No.: 24 AS Loc.: 19 Date: 06/15/2010
Sample ID: 5038200007_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	-0.026	-0.026	-0.0005	0.0019	1	10:47:59	No

Element: Hg Seq. No.: 25 AS Loc.: 20 Date: 06/15/2010
Sample ID: 5038388007_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	-0.028	-0.028	-0.0007	0.0018	1	10:49:21	No

Element: Hg Seq. No.: 26 AS Loc.: 21 Date: 06/15/2010
Sample ID: 5038388008_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	-0.039	-0.039	-0.0017	0.0007	1	10:50:43	No

Element: Hg Seq. No.: 27 AS Loc.: 22 Date: 06/15/2010
Sample ID: 5038310001_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	-0.020	-0.020	0.0000	0.0025	1	10:52:06	No

Element: Hg Seq. No.: 28 AS Loc.: 23 Date: 06/15/2010
Sample ID: 5038310002_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	-0.034	-0.034	-0.0012	0.0012	1	10:53:29	No

Element: Hg Seq. No.: 29 AS Loc.: 24 Date: 06/15/2010
Sample ID: 5038310003_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	-0.027	-0.027	-0.0007	0.0018	1	10:54:53	No

Element: Hg Seq. No.: 30 AS Loc.: 25 Date: 06/15/2010
Sample ID: 444763_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	4.884	4.884	0.4384	0.4409	1	10:56:17	No

Element: Hg Seq. No.: 31 AS Loc.: 26 Date: 06/15/2010
Sample ID: 444764_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	4.911	4.911	0.4409	0.4433	1	10:57:41	No

Element: Hg Seq. No.: 32 AS Loc.: 27 Date: 06/15/2010
Sample ID: 5038310004_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	-0.038	-0.038	-0.0016	0.0008	1	10:59:06	No

Element: Hg Seq. No.: 33 AS Loc.: 28 Date: 06/15/2010

Sample ID: 5038310005_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	-0.035	-0.035	-0.0014	0.0011	1 11:00:31	No

Element: Hg Seq. No.: 34 AS Loc.: 5 Date: 06/15/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	5.013	5.013	0.4500	0.4524	1 11:01:56	No

QC value within specified limits.

Element: Hg Seq. No.: 35 AS Loc.: 1 Date: 06/15/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	-0.031	-0.031	-0.0009	0.0015	1 11:03:19	No

QC value within specified limits.

Element: Hg Seq. No.: 36 AS Loc.: 29 Date: 06/15/2010
Sample ID: 5038310006_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	-0.030	-0.030	-0.0009	0.0016	1 11:04:42	No

Element: Hg Seq. No.: 37 AS Loc.: 30 Date: 06/15/2010
Sample ID: 5038310007_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	-0.024	-0.024	-0.0003	0.0021	1 11:06:09	No

Element: Hg Seq. No.: 38 AS Loc.: 31 Date: 06/15/2010
Sample ID: 5038310008_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	-0.023	-0.023	-0.0002	0.0022	1 11:07:36	No

Element: Hg Seq. No.: 39 AS Loc.: 32 Date: 06/15/2010
Sample ID: 5038469003_B2632Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	-0.032	-0.032	-0.0010	0.0014	1 11:09:00	No

Element: Hg Seq. No.: 40 AS Loc.: 33 Date: 06/15/2010
Sample ID: 444765_B2633Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	-0.018	-0.018	0.0002	0.0026	1 11:10:20	No

Element: Hg Seq. No.: 41 AS Loc.: 34 Date: 06/15/2010

Sample ID: 444766_B2633Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	5.272	5.272	0.4731	0.4756	1	11:11:40	No

Element: Hg Seq. No.: 42 AS Loc.: 35 Date: 06/15/2010
Sample ID: 5038459004_B2633Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	0.674	0.674	0.0620	0.0645	1	11:13:01	No

Element: Hg Seq. No.: 43 AS Loc.: 36 Date: 06/15/2010
Sample ID: 5038334001_B2633Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	-0.013	-0.013	0.0006	0.0031	1	11:14:22	No

Element: Hg Seq. No.: 44 AS Loc.: 37 Date: 06/15/2010
Sample ID: 444767_B2633Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	4.935	4.935	0.4430	0.4455	1	11:15:44	No

Element: Hg Seq. No.: 45 AS Loc.: 38 Date: 06/15/2010
Sample ID: 444768_B2633Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	4.949	4.949	0.4442	0.4466	1	11:17:07	No

Element: Hg Seq. No.: 46 AS Loc.: 5 Date: 06/15/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	5.030	5.030	0.4515	0.4539	1	11:18:31	No

QC value within specified limits.

Element: Hg Seq. No.: 47 AS Loc.: 1 Date: 06/15/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	-0.023	-0.023	-0.0003	0.0022	1	11:19:54	No

QC value within specified limits.

Element: Hg Seq. No.: 48 AS Loc.: 39 Date: 06/15/2010
Sample ID: 5038334002_B2633Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	-0.013	-0.013	0.0007	0.0031	1	11:21:16	No

Element: Hg Seq. No.: 49 AS Loc.: 40 Date: 06/15/2010

Sample ID: 5038334003_B2633Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	-0.029	-0.029	-0.0008	0.0017	1	11:22:39	No

Element: Hg Seq. No.: 50 AS Loc.: 41 Date: 06/15/2010
Sample ID: 5038334004_B2633Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	-0.026	-0.026	-0.0005	0.0020	1	11:24:03	No

Element: Hg Seq. No.: 51 AS Loc.: 42 Date: 06/15/2010
Sample ID: 5038334005_B2633Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	-0.021	-0.021	-0.0001	0.0023	1	11:25:27	No

Element: Hg Seq. No.: 52 AS Loc.: 43 Date: 06/15/2010
Sample ID: 5038334006_B2633Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	-0.015	-0.015	0.0005	0.0029	1	11:26:51	No

Element: Hg Seq. No.: 53 AS Loc.: 44 Date: 06/15/2010
Sample ID: 5038334007_B2633Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	0.028	0.028	0.0043	0.0068	1	11:28:18	No

Element: Hg Seq. No.: 54 AS Loc.: 45 Date: 06/15/2010
Sample ID: 5038334008_B2633Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	-0.015	-0.015	0.0004	0.0029	1	11:29:45	No

Element: Hg Seq. No.: 55 AS Loc.: 46 Date: 06/15/2010
Sample ID: 5038334009_B2633Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	-0.020	-0.020	0.0000	0.0025	1	11:31:12	No

Element: Hg Seq. No.: 56 AS Loc.: 47 Date: 06/15/2010
Sample ID: 5038334010_B2633Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	-0.020	-0.020	0.0000	0.0024	1	11:32:40	No

Element: Hg Seq. No.: 57 AS Loc.: 48 Date: 06/15/2010
Sample ID: 5038334011_B2633Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	-0.016	-0.016	0.0004	0.0029	1 11:34:04	No

Element: Hg Seq. No.: 58 AS Loc.: 5 Date: 06/15/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	5.049	5.049	0.4532	0.4556	1 11:35:26	No

QC value within specified limits.

Element: Hg Seq. No.: 59 AS Loc.: 1 Date: 06/15/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	-0.023	-0.023	-0.0003	0.0022	1 11:36:49	No

QC value within specified limits.

Element: Hg Seq. No.: 60 AS Loc.: 49 Date: 06/15/2010
Sample ID: 5038334012_B2633Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	-0.012	-0.012	0.0007	0.0031	1 11:38:09	No

Element: Hg Seq. No.: 61 AS Loc.: 50 Date: 06/15/2010
Sample ID: 5038334013_B2633Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	-0.027	-0.027	-0.0006	0.0019	1 11:39:30	No

Element: Hg Seq. No.: 62 AS Loc.: 51 Date: 06/15/2010
Sample ID: 5038334014_B2633Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	-0.017	-0.017	0.0003	0.0027	1 11:40:51	No

Element: Hg Seq. No.: 63 AS Loc.: 52 Date: 06/15/2010
Sample ID: 5038471001_B2633Dx1

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	-0.021	-0.021	-0.0001	0.0024	1 11:42:12	No

Element: Hg Seq. No.: 64 AS Loc.: 5 Date: 06/15/2010
Sample ID: CCV

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area	Time	Peak Stored
1	5.032	5.032	0.4517	0.4541	1 11:43:35	No

QC value within specified limits.

Element: Hg Seq. No.: 65 AS Loc.: 1 Date: 06/15/2010
Sample ID: CCB

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	-0.024	-0.024	-0.0003	0.0021	1	11:44:59	No

QC value within specified limits.

Element: Hg Seq. No.: 66 AS Loc.: 4 Date: 06/15/2010
Sample ID: RLVS

Repl #	SampleConc µg/L	StndConc µg/L	BlnkCorr Signal	Peak Area		Time	Peak Stored
1	2.049	2.049	0.1850	0.1875	1	11:46:21	No

QC value within specified limits.

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Wet Chemistry Methods

Project Number 5038203

Initials/ Date Compiled LJ 6-18-10

***Check all methods included in this package:**

____ *% Moisture (ASTM D 2974-87)*
____ *pH (SM4500H+B/EPA 150.1/EPA 9045)*
____ *Total Dissolved Solids (TDS) (SM2540C/EPA 160.1)*
____ *Total Suspended Solids (TSS) (SM2540D/EPA 160.2)*
____ *Total Solids (SM2540B/EPA 160.3)*
____ *Alkalinity (SM2320B/EPA 310.1)*
____ *Chloride (SM4500-Cl-E/EPA 325.2)*
__✓__ *Cyanide (SM4500-CN-E/EPA 335.4)*
____ *Fluoride (SM4500-F-C/EPA 340.2)*
____ *Ammonia (EPA 350.1, rev.2)*
____ *Hexavalent Chromium (EPA 7196A)*
____ *Total Kjeldahl Nitrogen (TKN) (EPA 351.2, rev.2)*
____ *Nitrate/Nitrite (EPA 353.2, rev.2)*
____ *Phosphorus (SM4500-P-E/EPA 365.2)*
____ *Turbidimetric Sulfate (ASTM D516-02/EPA 375.4)*
____ *Sulfide (SM4500-S2-D/EPA 376.2)*
____ *Biochemical Oxygen Demand (SM5210B/EPA 405.1)*
____ *Chemical Oxygen Demand (COD) (410.4/ Hach 8000)*
____ *Phenolics (EPA 420.4, rev.1)*
____ *TCLP prep (EPA SW-846 1311)*
____ *Other* _____

Pace Analytical Services
7726 Moller Road
Indianapolis, IN 46268

Laboratory Data Sheet

Cyanide Distillation Logbook

For Methods: EPA 9012A, SM4500CN-E, and EPA 335.4

$MgCl_2$ # 8631
H_2SO_4 # 2597
Sulfamic Acid # 8866
0.25 N NaOH # 8865
Sodium Arsenite # —
Lead Carbonate # 2927

CN Std. # 22077 Vol. used: 0.200

Ascorbic Acid # —

Date/Analyst	Sample #	Batch	Matrix	Sample Volume or Weight Initial	Sample Volume or Weight Final	Block #	Presence Y/N Cl_2	Presence Y/N S^{2-}	Comments
6-15-10 22C	B 444887	5124	AQ	50	50	3	N	N	
	L 444888								
	5038203001								
	ms 444889								
	5038203002								
	5038203003								
	5038203004 To 6-15-10								
	5038203005								
	ms 444890								
	msd 444891								
	5038203006								
	5038353003								
	5038464001								
	5038464002								
	5038464003								
	5038464004								
	5038464005								

Validated by : DDM / 6-17-10

Pace Analytical Services
7726 Moller Road
Indianapolis, IN 46268

Laboratory Data Sheet

Cyanide Distillation Logbook

For Methods: EPA 9012A, SM4500CN-E, and EPA 335.4

$MgCl_2$ # 8631
H_2SO_4 # 2597
Sulfamic Acid # 8087
0.25 N NaOH # 8085
Sodium Arsenite #
Lead Carbonate # 2927

CN Std. # 2077 Vol. used: 0.200

Ascorbic Acid # —

Date/Analyst	Sample #	Batch	Matrix	Sample Volume or Weight Initial	Sample Volume or Weight Final	Block #	Presence Y/N Cl_2	Presence Y/N S^{2-}	Comments
61510 QL	50384640006	5124	AQ	50mL	50mL	3	N	N	
↓	50384640007	↓	↓	↓	↓	↓	N	Y	
↓	50384640008	↓	↓	↓	↓	↓	N	N	

QL 61510 to

Form F-IN-I010rev.6, 28Apr2010

Validated by : DM 10-17-10

2/0

Lachat Analysis Log

PASI INDY Laboratory

Cal/ CCV Sol. #: 21973

ICV/Spike Sol.#: 22077

5038203

Thursday, June 17, 2010

Analyte	Analyst	Sample ID	Result	Client	Sample Type	Date/Time	QC Batch	Procedure	Comments	%rec	rpd
Cyanide	TPD	std #1 0.5mg/l	18462160			06/17/2010 10:40:24					
Cyanide	TPD	sdt #2 0.2mg/l	8229664			06/17/2010 10:41:21					
Cyanide	TPD	std #3 0.1mg/l	4283511			06/17/2010 10:42:19					
Cyanide	TPD	std #4 0.05mg/l	2209797			06/17/2010 10:43:17					
Cyanide	TPD	std #5 0.02mg/l	912366			06/17/2010 10:44:17					
Cyanide	TPD	std #6 0.01mg/l	474621			06/17/2010 10:45:15					
Cyanide	TPD	std #7 0.005mg/l	283106			06/17/2010 10:46:14					
Cyanide	TPD	std #8 0.00mg/l	0			06/17/2010 10:47:14					
Cyanide	TPD	ICV	0.050388			06/17/2010 10:49:28					
Cyanide	TPD	ICB	0.000475			06/17/2010 10:50:27					
Cyanide	TPD	444887	0.000598	In-house QC Account	BLANK	06/17/2010 10:51:25	5124	9012W MI			
Cyanide	TPD	444888	0.209103	In-house QC Account	LCS	06/17/2010 10:52:24	5124	9012W MI			
Cyanide	TPD	5038203001	0.001169	Arcadis U.S._ Inc.	PS	06/17/2010 10:53:22	5124	9012W MI			
Cyanide	TPD	444889	0.190195	In-house QC Account	MS	06/17/2010 10:54:20	5124	9012W MI			
Cyanide	TPD	5038203002	0.005406	Arcadis U.S._ Inc.	PS	06/17/2010 10:55:19	5124	9012W MI			
Cyanide	TPD	5038203003	0.00107	Arcadis U.S._ Inc.	PS	06/17/2010 10:56:17	5124	9012W MI			
Cyanide	TPD	5038203004	-0.000538	Arcadis U.S._ Inc.	PS	06/17/2010 10:57:15	5124	9012W MI			
Cyanide	TPD	5038203005	0.001174	Arcadis U.S._ Inc.	OQS	06/17/2010 10:58:12	5124	9012W MI			
Cyanide	TPD	444890	0.195495	In-house QC Account	MS	06/17/2010 10:59:09	5124	9012W MI			
Cyanide	TPD	444891	0.196489	In-house QC Account	MSD	06/17/2010 11:00:07	5124	9012W MI			
Cyanide	TPD	CCV	0.046292			06/17/2010 11:01:06					
Cyanide	TPD	CCB	-0.000538			06/17/2010 11:02:06					
Cyanide	TPD	5038203006	0.000289	Arcadis U.S._ Inc.	PS	06/17/2010 11:04:16	5124	9012W MI			
Cyanide	TPD	5038353003	0.021958	Haynes International_ I	PS	06/17/2010 11:05:13	5124	9012W MI			
Cyanide	TPD	5038464001	0.015275	August Mack-IN	PS	06/17/2010 11:06:11	5124	9012W MI			
Cyanide	TPD	5038464002	0.005544	August Mack-IN	PS	06/17/2010 11:07:07	5124	9012W MI			
Cyanide	TPD	5038464003	0.003338	August Mack-IN	PS	06/17/2010 11:08:03	5124	9012W MI			

Chloride Reagents

Chloride Color Reagent:

Cyanide Reagents

ChloramineT: 8928

Pyridine: 8856

Phosphate Buffer: 8929

0.25 N NaOH: 8885

Phenol Reagents

Buffered Potassium Ferricyanide:

4-AminoAntipyrine:

Ammonia Reagents

Sodium Nitroprusside:

Sodium Phenolate:

Hypochlorite Solution:

NH3 buffer:

TKN Reagents

08N NaOH:

TKN Buffer:

Salicylate nitroprusside sol'n:

TKN hypochlorite sol'n:

Mercuric sulfate sol'n:

TKN carrier:

TKN digestion solution:

Reviewed By: TPD

Review Date: Thursday, June 17, 2010

Lachat Analysis Log

PASI INDY Laboratory

Cal/ CCV Sol. #: 21973

ICV/Spike Sol.#: 22077

Thursday, June 17, 2010

Analyte	Analyst	Sample ID	Result	Client	Sample Type	Date/Time	QC Batch	Procedure	Comments	%rec	rpd
Cyanide	TPD	5038464004	0.057908	August Mack-IN	PS	06/17/2010 11:09:02	5124	9012W MI			
Cyanide	TPD	5038464005	1.445611	August Mack-IN	PS	06/17/2010 11:10:00	5124	9012W MI	rr@10x		
Cyanide	TPD	5038464006	0.086617	August Mack-IN	PS	06/17/2010 11:10:59	5124	9012W MI			
Cyanide	TPD	5038464007	0.070987	August Mack-IN	PS	06/17/2010 11:11:57	5124	9012W MI			
Cyanide	TPD	5038464008	1.243418	August Mack-IN	PS	06/17/2010 11:12:55	5124	9012W MI	rr@10x		
Cyanide	TPD	CCV	0.047025			06/17/2010 11:13:55					
Cyanide	TPD	CCB	-0.000538			06/17/2010 11:14:55					
Cyanide	TPD	445143	-0.000538	In-house QC Account	BLANK	06/17/2010 11:17:06	5143	9012 SMI			
Cyanide	TPD	445144	0.198437	In-house QC Account	LCS	06/17/2010 11:18:05	5143	9012 SMI			
Cyanide	TPD	5038344001	0.000609	BHE Environmental	PS	06/17/2010 11:19:02	5143	9012 SMI			
Cyanide	TPD	445145	0.191621	In-house QC Account	MS	06/17/2010 11:19:59	5143	9012 SMI			
Cyanide	TPD	5038344002	0.00141	BHE Environmental	PS	06/17/2010 11:20:57	5143	9012 SMI			
Cyanide	TPD	5038344003	-0.000538	BHE Environmental	PS	06/17/2010 11:21:54	5143	9012 SMI			
Cyanide	TPD	5038344004	-0.000538	BHE Environmental	PS	06/17/2010 11:22:51	5143	9012 SMI			
Cyanide	TPD	5038344005	-0.000538	BHE Environmental	PS	06/17/2010 11:23:49	5143	9012 SMI			
Cyanide	TPD	5038344006	-0.000538	BHE Environmental	PS	06/17/2010 11:24:46	5143	9012 SMI			
Cyanide	TPD	5038344007	-0.000538	BHE Environmental	PS	06/17/2010 11:25:43	5143	9012 SMI			
Cyanide	TPD	CCV	0.045693			06/17/2010 11:26:42					
Cyanide	TPD	CCB	-0.000538			06/17/2010 11:27:42					
Cyanide	TPD	5038344008	-0.000306	BHE Environmental	PS	06/17/2010 11:29:54	5143	9012 SMI			
Cyanide	TPD	5038344009	-0.000538	BHE Environmental	PS	06/17/2010 11:30:52	5143	9012 SMI			
Cyanide	TPD	5038344010	0.000565	BHE Environmental	PS	06/17/2010 11:31:51	5143	9012 SMI			
Cyanide	TPD	5038392001	0.002029	August Mack-IN	PS	06/17/2010 11:32:50	5143	9012 SMI			
Cyanide	TPD	445147	0.197509	In-house QC Account	MS	06/17/2010 11:33:48	5143	9012 SMI			
Cyanide	TPD	5038392002	-0.000538	August Mack-IN	PS	06/17/2010 11:34:46	5143	9012 SMI			
Cyanide	TPD	5038392003	0.002021	August Mack-IN	PS	06/17/2010 11:35:45	5143	9012 SMI			
Cyanide	TPD	5038392004	0.024078	August Mack-IN	PS	06/17/2010 11:36:43	5143	9012 SMI			

Chloride Reagents

Chloride Color Reagent:

Cyanide Reagents

ChloramineT: 8928

Pyridine: 8856

Phosphate Buffer: 8929

0.25 N NaOH: 8885

Phenol Reagents

Buffered Potassium Ferricyanide:

4-AminoAntipyrine:

Ammonia Reagents

Sodium Nitroprusside:

Sodium Phenolate:

Hypochlorite Solution:

NH3 buffer:

TKN Reagents

08N NaOH:

TKN Buffer:

Salicylate nitroprusside sol'n:

TKN hypochlorite sol'n:

Mercuric sulfate sol'n:

TKN carrier:

TKN digestion solution:

Reviewed By: TPD

Review Date: Thursday, June 17, 2010

Lachat Analysis Log

PASI INDY Laboratory

Cal/ CCV Sol. #: 21973

ICV/Spike Sol.#: 22077

Thursday, June 17, 2010

Analyte	Analyst	Sample ID	Result	Client	Sample Type	Date/Time	QC Batch	Procedure	Comments	%rec	rpd
Cyanide	TPD	5038392005	0.130382	August Mack-IN	PS	06/17/2010 11:37:41	5143	9012 SMI			
Cyanide	TPD	5038392006	0.100131	August Mack-IN	PS	06/17/2010 11:38:38	5143	9012 SMI			
Cyanide	TPD	CCV	0.046372			06/17/2010 11:39:37					
Cyanide	TPD	CCB	-0.000538			06/17/2010 11:40:37					
Cyanide	TPD	5038392007	0.073286	August Mack-IN	PS	06/17/2010 11:42:49	5143	9012 SMI			
Cyanide	TPD	5038392008	0.020734	August Mack-IN	PS	06/17/2010 11:43:46	5143	9012 SMI			
Cyanide	TPD	5038392009	0.012185	August Mack-IN	PS	06/17/2010 11:44:43	5143	9012 SMI			
Cyanide	TPD	5038392010	0.122274	August Mack-IN	PS	06/17/2010 11:45:41	5143	9012 SMI			
Cyanide	TPD	444872	-0.000538	In-house QC Account	BLANK	06/17/2010 11:46:38	5123	3354 W			
Cyanide	TPD	444873	0.186774	In-house QC Account	LCS	06/17/2010 11:47:37	5123	3354 W			
Cyanide	TPD	5038470004	-0.000538	ATC Associates	PS	06/17/2010 11:48:37	5123	3354 W			
Cyanide	TPD	444874	0.171151	In-house QC Account	MS	06/17/2010 11:49:35	5123	3354 W			
Cyanide	TPD	5038470005	-0.000538	ATC Associates	PS	06/17/2010 11:50:34	5123	3354 W			
Cyanide	TPD	5038470006	-0.000538	ATC Associates	PS	06/17/2010 11:51:32	5123	3354 W			
Cyanide	TPD	CCV	0.045574			06/17/2010 11:52:31					
Cyanide	TPD	CCB	-0.000538			06/17/2010 11:53:31					
Cyanide	TPD	5038234001	-0.000538	ATC Associates	PS	06/17/2010 11:55:43	5123	3354 W			
Cyanide	TPD	5038234002	-0.000538	ATC Associates	PS	06/17/2010 11:56:41	5123	3354 W			
Cyanide	TPD	5038234003	-0.000538	ATC Associates	PS	06/17/2010 11:57:39	5123	3354 W			
Cyanide	TPD	5038430001	-0.000538	August Mack-IN	PS	06/17/2010 11:58:38	5123	3354 W			
Cyanide	TPD	5038317003	0.005723	Environmental Resourc	PS	06/17/2010 11:59:36	5123	3354 W			
Cyanide	TPD	5038430002	0.037668	August Mack-IN	PS	06/17/2010 12:00:34	5123	3354 W			
Cyanide	TPD	5038430003	0.313631	August Mack-IN	OQS	06/17/2010 12:01:31	5123	3354 W			
Cyanide	TPD	444875	0.452286	In-house QC Account	MS	06/17/2010 12:02:28	5123	3354 W			
Cyanide	TPD	444876	0.464154	In-house QC Account	MSD	06/17/2010 12:03:26	5123	3354 W			
Cyanide	TPD	5038430004	1.038262	August Mack-IN	PS	06/17/2010 12:04:23	5123	3354 W	rr@10x		
Cyanide	TPD	CCV	0.047394			06/17/2010 12:05:22					

Chloride Reagents

Chloride Color Reagent:

Cyanide Reagents

ChloramineT: 8928

Pyridine: 8856

Phosphate Buffer: 8929

0.25 N NaOH: 8885

Phenol Reagents

Buffered Potassium Ferricyanide:

4-AminoAntipyrine:

Ammonia Reagents

Sodium Nitroprusside:

Sodium Phenolate:

Hypochlorite Solution:

NH3 buffer:

TKN Reagents

08N NaOH:

TKN Buffer:

Salicylate nitroprusside sol'n:

TKN hypochlorite sol'n:

Mercuric sulfate sol'n:

TKN carrier:

TKN digestion solution:

Reviewed By: TPD

Review Date: Thursday, June 17, 2010

Lachat Analysis Log

PASI INDY Laboratory

Cal/ CCV Sol. #: 21973

ICV/Spike Sol.#: 22077

Thursday, June 17, 2010

Analyte	Analyst	Sample ID	Result	Client	Sample Type	Date/Time	QC Batch	Procedure	Comments	%rec	rpd
Cyanide	TPD	CCB	-0.000538			06/17/2010 12:06:22					
Cyanide	TPD	5038430005	0.01946	August Mack-IN	PS	06/17/2010 12:08:36	5123	3354 W			
Cyanide	TPD	5038430006	0.947289	August Mack-IN	PS	06/17/2010 12:09:35	5123	3354 W	rr@10x		
Cyanide	TPD	5038466001	-0.000538	ATC Associates	PS	06/17/2010 12:10:35	5123	3354 W			
Cyanide	TPD	5038466002	-0.000538	ATC Associates	PS	06/17/2010 12:11:33	5123	3354 W			
Cyanide	TPD	5038466003	-0.000538	ATC Associates	PS	06/17/2010 12:12:31	5123	3354 W			
Cyanide	TPD	445444	-0.000538	In-house QC Account	BLANK	06/17/2010 12:13:30	5144	9012 SMI			
Cyanide	TPD	445445	0.185084	In-house QC Account	LCS	06/17/2010 12:14:28	5144	9012 SMI			
Cyanide	TPD	5038378001	-0.000538	BHE Environmental	PS	06/17/2010 12:15:26	5144	9012 SMI			
Cyanide	TPD	445446	0.188646	In-house QC Account	MS	06/17/2010 12:16:25	5144	9012 SMI			
Cyanide	TPD	5038378003	-0.000538	BHE Environmental	PS	06/17/2010 12:17:23	5144	9012 SMI			
Cyanide	TPD	CCV	0.04529			06/17/2010 12:18:23					
Cyanide	TPD	CCB	-0.000538			06/17/2010 12:19:23					
Cyanide	TPD	5038378004	-0.000538	BHE Environmental	PS	06/17/2010 12:21:35	5144	9012 SMI			
Cyanide	TPD	5038423001	0.044336	August Mack-IN	PS	06/17/2010 12:22:33	5144	9012 SMI			
Cyanide	TPD	5038423002	0.012742	August Mack-IN	PS	06/17/2010 12:23:31	5144	9012 SMI			
Cyanide	TPD	5038423003	0.020004	August Mack-IN	PS	06/17/2010 12:24:28	5144	9012 SMI			
Cyanide	TPD	5038423004	0.01526	August Mack-IN	PS	06/17/2010 12:25:25	5144	9012 SMI			
Cyanide	TPD	5038423005	1.512299	August Mack-IN	PS	06/17/2010 12:26:25	5144	9012 SMI	rr@10x		
Cyanide	TPD	5038423006	1.640132	August Mack-IN	PS	06/17/2010 12:27:24	5144	9012 SMI	rr@10x		
Cyanide	TPD	5038425001	0.002595	Environ	PS	06/17/2010 12:28:24	5144	9012 SMI			
Cyanide	TPD	445447	0.20751	In-house QC Account	MS	06/17/2010 12:29:23	5144	9012 SMI			
Cyanide	TPD	445448	0.199531	In-house QC Account	MSD	06/17/2010 12:30:21	5144	9012 SMI			
Cyanide	TPD	CCV	0.045359			06/17/2010 12:31:20					
Cyanide	TPD	CCB	0.000247			06/17/2010 12:32:20					
Cyanide	TPD	5038425002	0.001159	Environ	PS	06/17/2010 12:34:34	5144	9012 SMI			
Cyanide	TPD	5038425003	0.002014	Environ	PS	06/17/2010 12:35:33	5144	9012 SMI			

Chloride Reagents

Chloride Color Reagent:

Cyanide Reagents

ChloramineT: 8928

Pyridine: 8856

Phosphate Buffer: 8929

0.25 N NaOH: 8885

Phenol Reagents

Buffered Potassium Ferricyanide:

4-AminoAntipyrine:

Ammonia Reagents

Sodium Nitroprusside:

Sodium Phenolate:

Hypochlorite Solution:

NH3 buffer:

TKN Reagents

08N NaOH:

TKN Buffer:

Salicylate nitroprusside sol'n:

TKN hypochlorite sol'n:

Mercuric sulfate sol'n:

TKN carrier:

TKN digestion solution:

Reviewed By: TPD

Review Date: Thursday, June 17, 2010

Lachat Analysis Log

PASI INDY Laboratory

Cal/ CCV Sol. #: 21973

ICV/Spike Sol.#: 22077

Thursday, June 17, 2010

Analyte	Analyst	Sample ID	Result	Client	Sample Type	Date/Time	QC Batch	Procedure	Comments	%rec	rpd
Cyanide	TPD	5038425004	0.000567	Environ	PS	06/17/2010 12:36:31	5144	9012 SMI			
Cyanide	TPD	5038425005	0.000608	Environ	PS	06/17/2010 12:37:29	5144	9012 SMI			
Cyanide	TPD	5038425006	-0.000538	Environ	PS	06/17/2010 12:38:28	5144	9012 SMI			
Cyanide	TPD	5038425007	0.00146	Environ	PS	06/17/2010 12:39:26	5144	9012 SMI			
Cyanide	TPD	5038425008	-0.000538	Environ	PS	06/17/2010 12:40:24	5144	9012 SMI			
Cyanide	TPD	5038425009	-0.000538	Environ	PS	06/17/2010 12:41:22	5144	9012 SMI			
Cyanide	TPD	5038425010	-0.000538	Environ	PS	06/17/2010 12:42:19	5144	9012 SMI			
Cyanide	TPD	5038464005	0.140592	August Mack-IN	PS	06/17/2010 12:43:16	5124	9012W MI	report@10x		
Cyanide	TPD	CCV	0.045581			06/17/2010 12:44:16					
Cyanide	TPD	CCB	-0.000538			06/17/2010 12:45:16					
Cyanide	TPD	5038464008	0.117515	August Mack-IN	PS	06/17/2010 12:47:30	5124	9012W MI	report@10x		
Cyanide	TPD	5038430004	0.098659	August Mack-IN	PS	06/17/2010 12:48:29	5123	3354 W	report@10x		
Cyanide	TPD	5038430006	0.087815	August Mack-IN	PS	06/17/2010 12:49:28	5123	3354 W	report@10x		
Cyanide	TPD	5038423005	0.151867	August Mack-IN	PS	06/17/2010 12:50:28	5144	9012 SMI	report@10x		
Cyanide	TPD	5038423006	0.157887	August Mack-IN	PS	06/17/2010 12:51:27	5144	9012 SMI	report@10x		
Cyanide	TPD	5038464005	0.144299	August Mack-IN	PS	06/17/2010 12:52:25	5124	9012W MI	did not report		
Cyanide	TPD	CCV	0.0454			06/17/2010 12:53:24					
Cyanide	TPD	CCB	-0.000538			06/17/2010 12:54:24					

Chloride Reagents

Chloride Color Reagent:

Cyanide Reagents

ChloramineT: 8928

Pyridine: 8856

Phosphate Buffer: 8929

0.25 N NaOH: 8885

Phenol Reagents

Buffered Potassium Ferricyanide:

4-AminoAntipyrine:

Ammonia Reagents

Sodium Nitroprusside:

Sodium Phenolate:

Hypochlorite Solution:

NH3 buffer:

TKN Reagents

08N NaOH:

TKN Buffer:

Salicylate nitroprusside sol'n:

TKN hypochlorite sol'n:

Mercuric sulfate sol'n:

TKN carrier:

TKN digestion solution:

Reviewed By: TPD

Review Date: Thursday, June 17, 2010

Creator: tpd
Creation Date: Jun 7, 2010 13:56:10
Last Modified: Jun 17, 2010 12:49:48
Description: cyanide

Cup #	Sample ID	Manual Dilution	Sample Type	
1	std #1 0.5mg/l	1.0000	CalStd	
2	sdt #2 0.2mg/l	1.0000	CalStd	
3	std #3 0.1mg/l	1.0000	CalStd	
4	std #4 0.05mg/l	1.0000	CalStd	
5	std #5 0.02mg/l	1.0000	CalStd	
6	std #6 0.01mg/l	1.0000	CalStd	
7	std #7 0.005mg/l	1.0000	CalStd	
8	std #8 0.00mg/l	1.0000	CalStd	
1	444887	1.0000	Unknown	
2	444888	1.0000	Unknown	
3	5038203001	1.0000	Unknown	
4	444889	1.0000	Unknown	
5	5038203002	1.0000	Unknown	
6	5038203003	1.0000	Unknown	
7	5038203004	1.0000	Unknown	
8	5038203005	1.0000	Unknown	
9	444890	1.0000	Unknown	
10	444891	1.0000	Unknown	
11	5038203006	1.0000	Unknown	
12	5038353003	1.0000	Unknown	
13	5038464001	1.0000	Unknown	
14	5038464002	1.0000	Unknown	
15	5038464003	1.0000	Unknown	
16	5038464004	1.0000	Unknown	
17	5038464005	1.0000	Unknown	
18	5038464006	1.0000	Unknown	
19	5038464007	1.0000	Unknown	
20	5038464008	1.0000	Unknown	
21	445143	1.0000	Unknown	
22	445144	1.0000	Unknown	
23	5038344001	1.0000	Unknown	
24	445145	1.0000	Unknown	
25	5038344002	1.0000	Unknown	
26	5038344003	1.0000	Unknown	
27	5038344004	1.0000	Unknown	
28	5038344005	1.0000	Unknown	
29	5038344006	1.0000	Unknown	
30	5038344007	1.0000	Unknown	
31	5038344008	1.0000	Unknown	
32	5038344009	1.0000	Unknown	
33	5038344010	1.0000	Unknown	
34	5038392001	1.0000	Unknown	

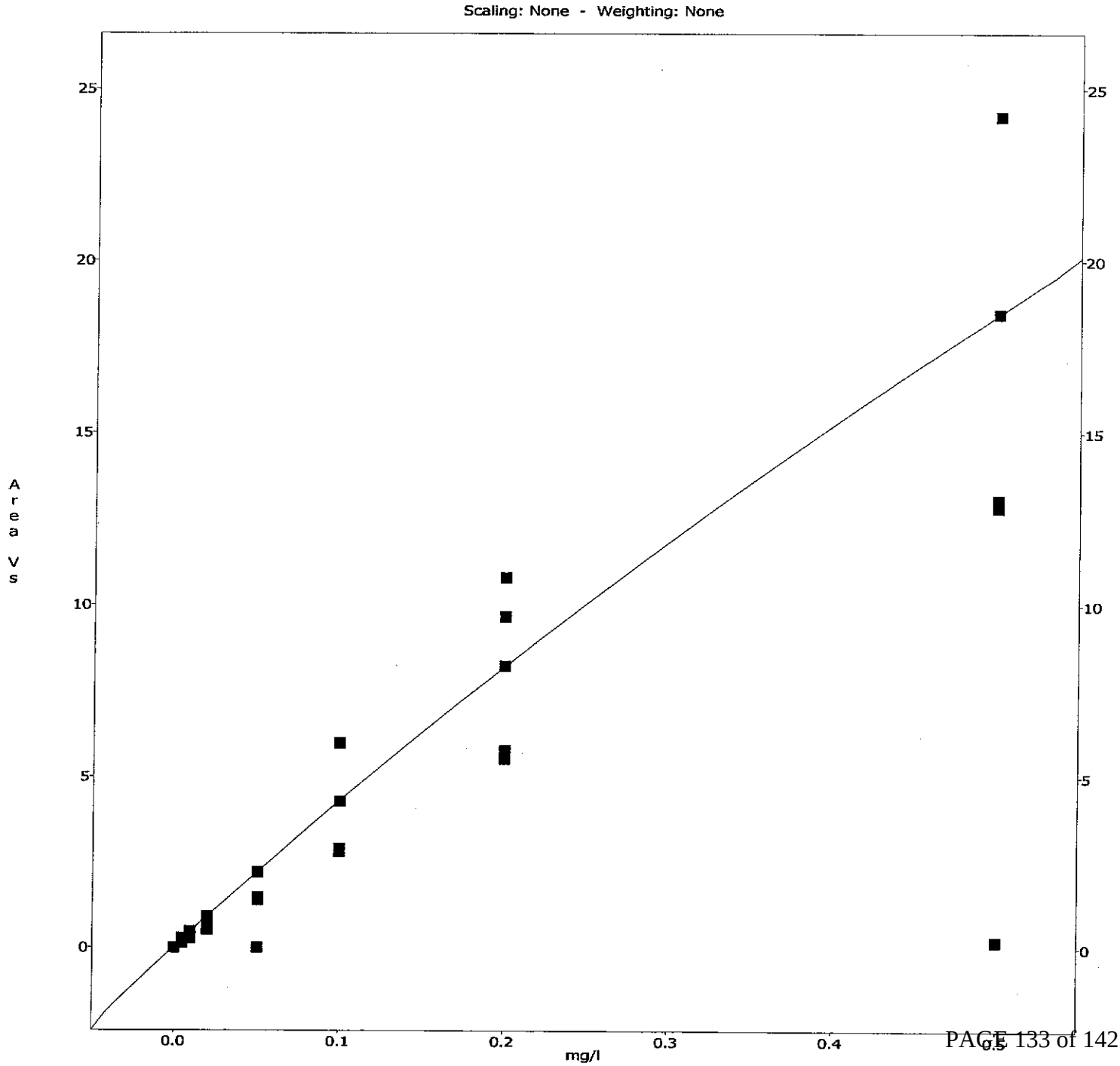
Cup #	Sample ID	Manual Dilution	Sample Type	
35	445147	1.0000	Unknown	
36	5038392002	1.0000	Unknown	
37	5038392003	1.0000	Unknown	
38	5038392004	1.0000	Unknown	
39	5038392005	1.0000	Unknown	
40	5038392006	1.0000	Unknown	
41	5038392007	1.0000	Unknown	
42	5038392008	1.0000	Unknown	
43	5038392009	1.0000	Unknown	
44	5038392010	1.0000	Unknown	
45	444872	1.0000	Unknown	
46	444873	1.0000	Unknown	
47	5038470004	1.0000	Unknown	
48	444874	1.0000	Unknown	
49	5038470005	1.0000	Unknown	
50	5038470006	1.0000	Unknown	
51	5038234001	1.0000	Unknown	
52	5038234002	1.0000	Unknown	
53	5038234003	1.0000	Unknown	
54	5038430001	1.0000	Unknown	
55	5038317003	1.0000	Unknown	
56	5038430002	1.0000	Unknown	
57	5038430003	1.0000	Unknown	
58	444875	1.0000	Unknown	
59	444876	1.0000	Unknown	
60	5038430004	1.0000	Unknown	
61	5038430005	1.0000	Unknown	
62	5038430006	1.0000	Unknown	
63	5038466001	1.0000	Unknown	
64	5038466002	1.0000	Unknown	
65	5038466003	1.0000	Unknown	
66	445444	1.0000	Unknown	
67	445445	1.0000	Unknown	
68	5038378001	1.0000	Unknown	
69	445446	1.0000	Unknown	
70	5038378003	1.0000	Unknown	
71	5038378004	1.0000	Unknown	
72	5038423001	1.0000	Unknown	
73	5038423002	1.0000	Unknown	
74	5038423003	1.0000	Unknown	
75	5038423004	1.0000	Unknown	
76	5038423005	1.0000	Unknown	
77	5038423006	1.0000	Unknown	
78	5038425001	1.0000	Unknown	
79	445447	1.0000	Unknown	
80	445448	1.0000	Unknown	
81	5038425002	1.0000	Unknown	

Cup #	Sample ID	Manual Dilution	Sample Type	
82	5038425003	1.0000	Unknown	
83	5038425004	1.0000	Unknown	
84	5038425005	1.0000	Unknown	
85	5038425006	1.0000	Unknown	
86	5038425007	1.0000	Unknown	
87	5038425008	1.0000	Unknown	
88	5038425009	1.0000	Unknown	
89	5038425010	1.0000	Unknown	
90	5038464005	10.0000	Unknown	
91	5038464008	10.0000	Unknown	
92	5038430004	10.0000	Unknown	
93	5038430006	10.0000	Unknown	
94	5038423005	10.0000	Unknown	
95	5038423006	10.0000	Unknown	
90	5038464005	10.0000	Unknown	

Cyanide

Lvl	Area	mg/l	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5	Replic STD	Replic % RSD	Residual 2nd Poly
1	18462160	0.500	18462160	24212218	198988	13057415	12835296	8896751.0	64.7	0.0
2	8229664	0.200	8229664	10794698	9664163	5775600	5524788	2329545.3	29.1	-0.2
3	4283511	0.100	4283511	5979890	2900082	2806874	2900082	1377348.0	36.5	0.5
4	2209797	0.050	2209797	0	1463682	1388392	1463682	802962.8	61.5	0.2
5	912366	0.020	912366	595861	531802	595861	607472	150390.0	23.2	0.2
6	474621	0.010	474621	298267	267302	298267	314501	82308.4	24.9	-0.7
7	283106	0.005	283106	156432	136058	156432	163461	59038.4	33.0	-15.5
8	0	0.000	0	0	0	0	0	0.0	0.0	

2nd Order Poly
Conc = 2.641e-016 Area² + 2.223e-008 Area - 5.384e-004
r = 1.0000



Printed: Thursday, June 17, 2010 - 12:58 PM

CYANIDE: EPA 335.4

CYANIDE BUFFER 8929 CYANIDE CARRIER 8885
CHLORAMINE T 8928 PYRIDINE 8856
CAL PREP STD 21973 ICV PREP STD 22077
CALIBRATION STD'S PREPARED PER SOP# S-IN-I-015-rev.9
BY: RdL DATE 6-17-10

OPERATOR: tpd
ACQ. TIME: Jun 17, 2010 10:40:23
DATA FILENAME: C:\OMNION\DATA\061710C1.FDT
METHOD FILENAME:
TRAY FILENAME:

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 8 -- Cup Range: 1 to 20

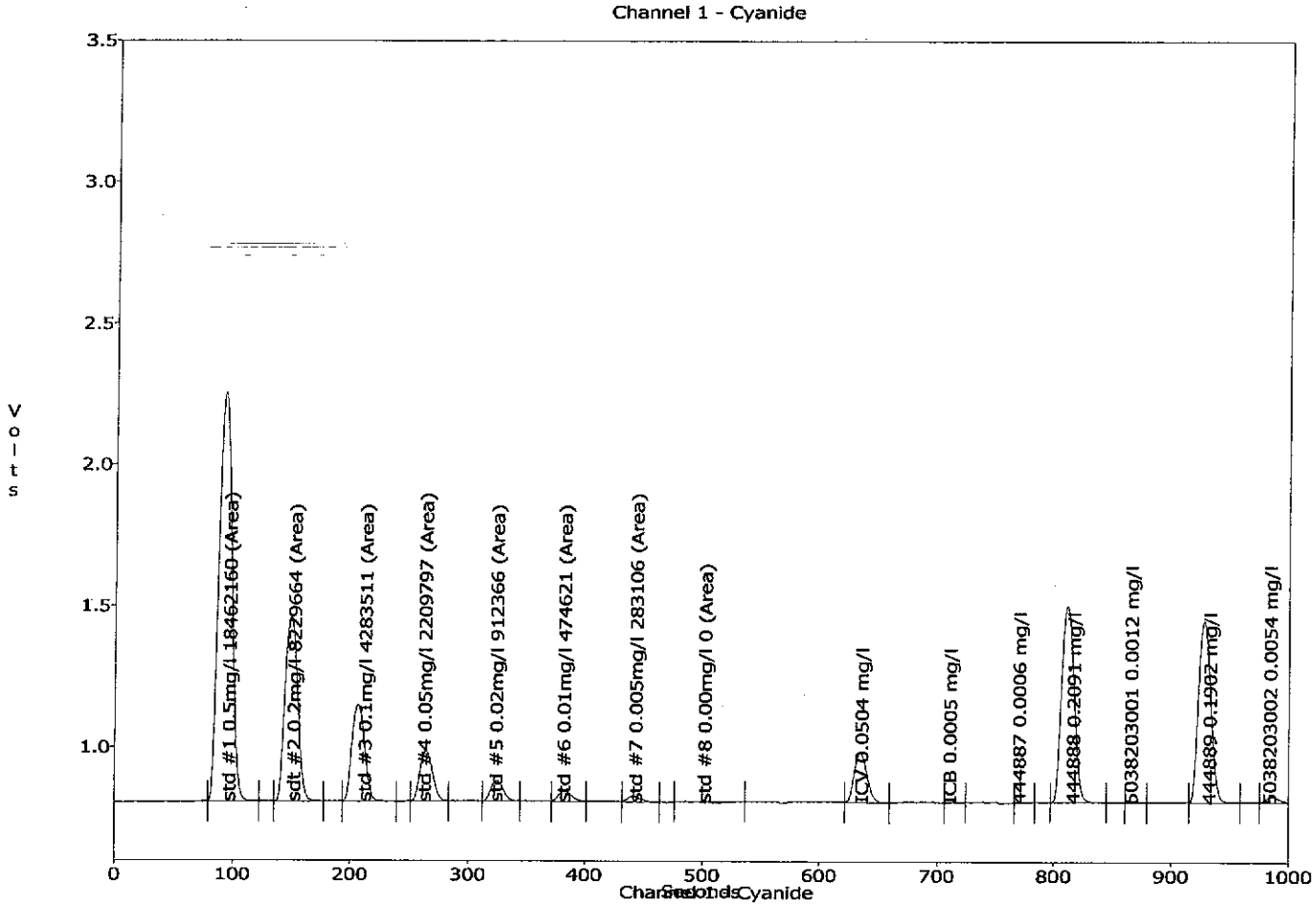
Cup	Sample ID	Sampling Date	Sampling Time	# of Reps	Cyanide (mg/l)	Man Dil Factor
1	444887	17 Jun 2010	10:51:25	1	0.0006	1.0
2	444888	17 Jun 2010	10:52:24	1	0.2091	1.0
3	5038203001	17 Jun 2010	10:53:22	1	0.0012	1.0
4	444889	17 Jun 2010	10:54:20	1	0.1902	1.0
5	5038203002	17 Jun 2010	10:55:19	1	0.0054	1.0
6	5038203003	17 Jun 2010	10:56:17	1	0.0011	1.0
7	5038203004	17 Jun 2010	10:57:15	1	-0.0005	1.0
8	5038203005	17 Jun 2010	10:58:12	1	0.0012	1.0
9	444890	17 Jun 2010	10:59:09	1	0.1955	1.0
10	444891	17 Jun 2010	11:00:07	1	0.1965	1.0
11	5038203006	17 Jun 2010	11:04:16	1	0.0003	1.0
12	5038353003	17 Jun 2010	11:05:13	1	0.0220	1.0
13	5038464001	17 Jun 2010	11:06:11	1	0.0153	1.0
14	5038464002	17 Jun 2010	11:07:07	1	0.0055	1.0
15	5038464003	17 Jun 2010	11:08:03	1	0.0033	1.0
16	5038464004	17 Jun 2010	11:09:02	1	0.0579	1.0
17	5038464005	17 Jun 2010	11:10:00	1	1.4456	1.0
18	5038464006	17 Jun 2010	11:10:59	1	0.0866	1.0
19	5038464007	17 Jun 2010	11:11:57	1	0.0710	1.0
20	5038464008	17 Jun 2010	11:12:55	1	1.2434	1.0

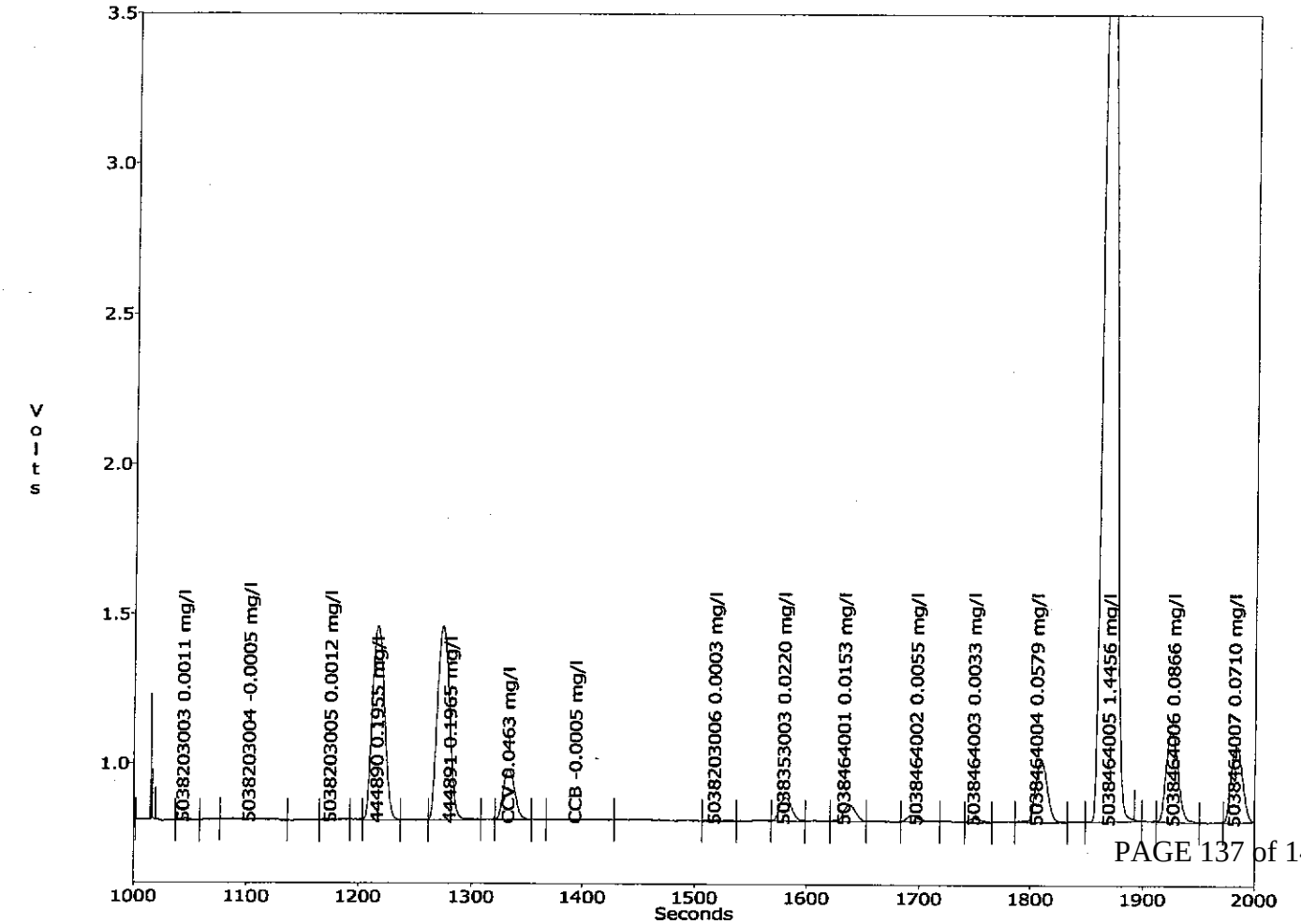
Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 8 -- Cup Range: 21 to 64

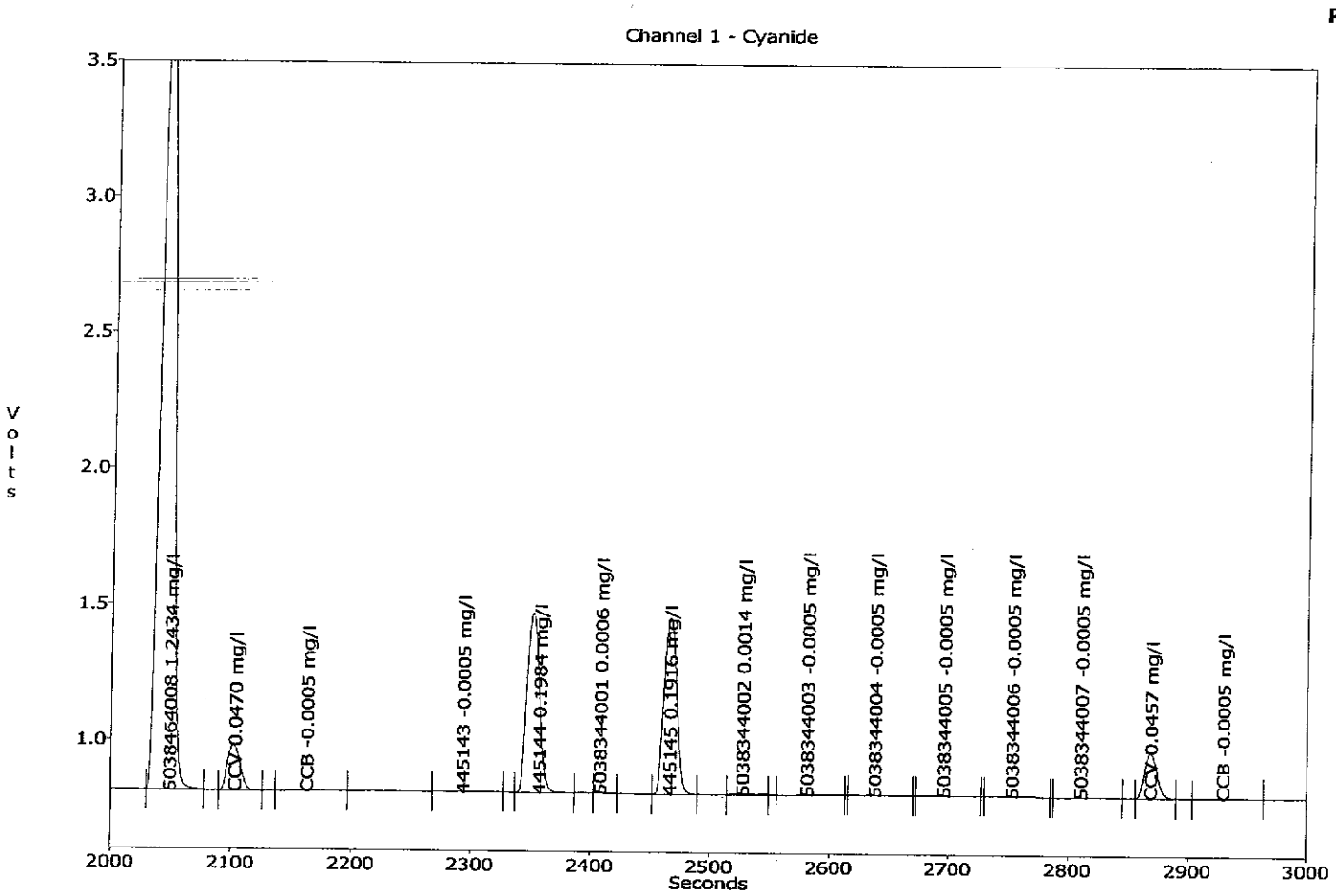
Cup	Sample ID	Sampling Date	Sampling Time	Rep #	Cyanide (mg/l)	Man Dil Factor
21	445143	17 Jun 2010	11:17:06	1	-0.0005	1.0
22	445144	17 Jun 2010	11:18:05	1	0.1984	1.0
23	5038344001	17 Jun 2010	11:19:02	1	0.0006	1.0
24	445145	17 Jun 2010	11:19:59	1	0.1916	1.0
25	5038344002	17 Jun 2010	11:20:57	1	0.0014	1.0
26	5038344003	17 Jun 2010	11:21:54	1	-0.0005	1.0
27	5038344004	17 Jun 2010	11:22:51	1	-0.0005	1.0
28	5038344005	17 Jun 2010	11:23:49	1	-0.0005	1.0
29	5038344006	17 Jun 2010	11:24:46	1	-0.0005	1.0
30	5038344007	17 Jun 2010	11:25:43	1	-0.0005	1.0
31	5038344008	17 Jun 2010	11:29:54	1	-0.0003	1.0
32	5038344009	17 Jun 2010	11:30:52	1	-0.0005	1.0
33	5038344010	17 Jun 2010	11:31:51	1	0.0006	1.0
34	5038392001	17 Jun 2010	11:32:50	1	0.0020	1.0
35	445147	17 Jun 2010	11:33:48	1	0.1975	1.0
36	5038392002	17 Jun 2010	11:34:46	1	-0.0005	1.0
37	5038392003	17 Jun 2010	11:35:45	1	0.0020	1.0
38	5038392004	17 Jun 2010	11:36:43	1	0.0241	1.0
39	5038392005	17 Jun 2010	11:37:41	1	0.1304	1.0
40	5038392006	17 Jun 2010	11:38:38	1	0.1001	1.0
41	5038392007	17 Jun 2010	11:42:49	1	0.0733	1.0
42	5038392008	17 Jun 2010	11:43:46	1	0.0207	1.0
43	5038392009	17 Jun 2010	11:44:43	1	0.0122	1.0
44	5038392010	17 Jun 2010	11:45:41	1	0.1223	1.0
45	444872	17 Jun 2010	11:46:38	1	-0.0005	1.0
46	444873	17 Jun 2010	11:47:37	1	0.1868	1.0
47	5038470004	17 Jun 2010	11:48:37	1	-0.0005	1.0
48	444874	17 Jun 2010	11:49:35	1	0.1712	1.0
49	5038470005	17 Jun 2010	11:50:34	1	-0.0005	1.0
50	5038470006	17 Jun 2010	11:51:32	1	-0.0005	1.0
51	5038234001	17 Jun 2010	11:55:43	1	-0.0005	1.0
52	5038234002	17 Jun 2010	11:56:41	1	-0.0005	1.0
53	5038234003	17 Jun 2010	11:57:39	1	-0.0005	1.0
54	5038430001	17 Jun 2010	11:58:38	1	-0.0005	1.0
55	5038317003	17 Jun 2010	11:59:36	1	0.0057	1.0
56	5038430002	17 Jun 2010	12:00:34	1	0.0377	1.0
57	5038430003	17 Jun 2010	12:01:31	1	0.3136	1.0
58	444875	17 Jun 2010	12:02:28	1	0.4523	1.0
59	444876	17 Jun 2010	12:03:26	1	0.4642	1.0
60	5038430004	17 Jun 2010	12:04:23	1	1.0383	1.0
61	5038430005	17 Jun 2010	12:08:36	1	0.0195	1.0
62	5038430006	17 Jun 2010	12:09:35	1	0.9473	1.0
63	5038466001	17 Jun 2010	12:10:35	1	-0.0005	1.0
64	5038466002	17 Jun 2010	12:11:33	1	-0.0005	1.0

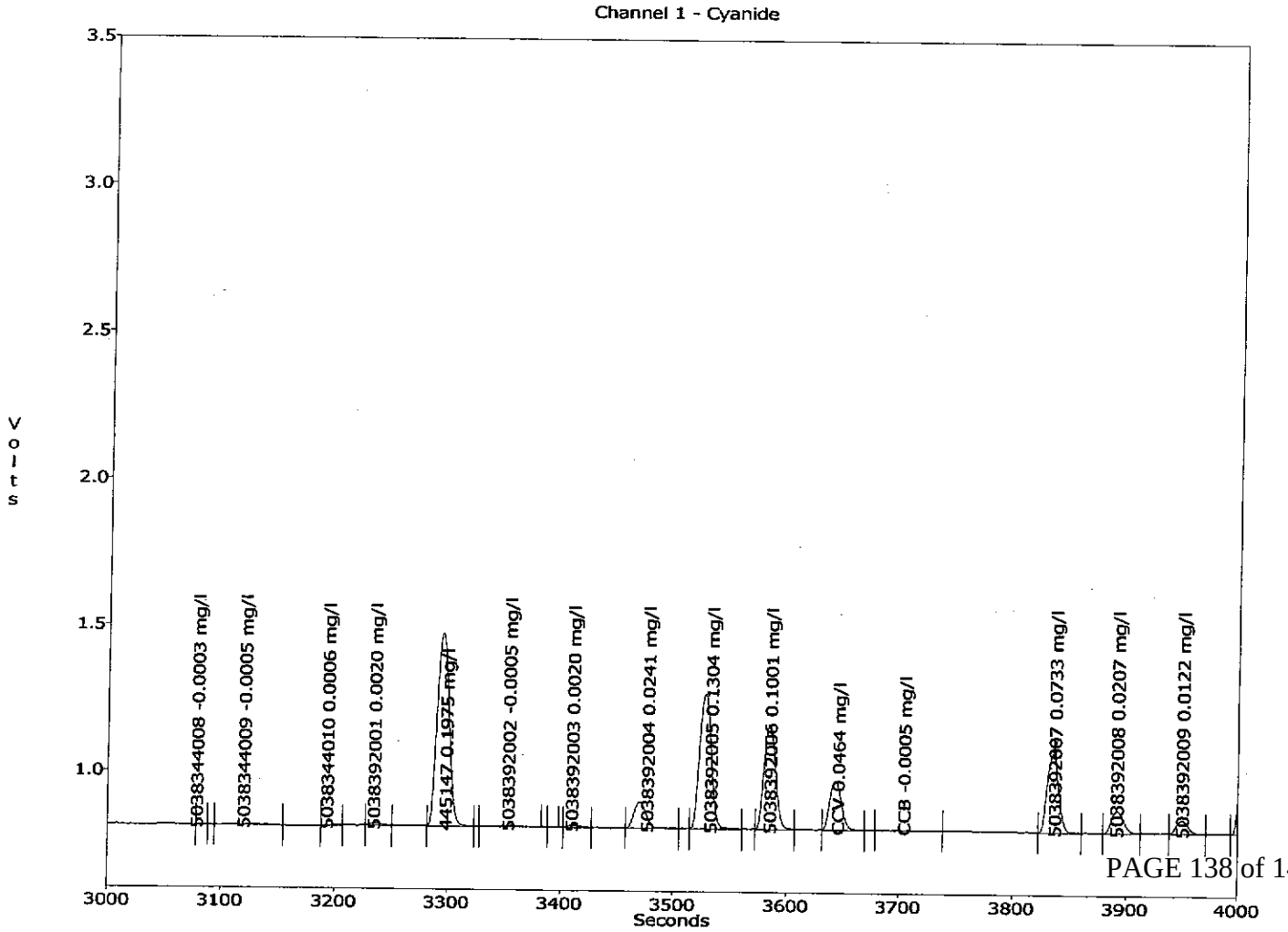
Multi-Channel Table
Type: DQM
Channel Range: 1 to 8 -- Cup Range: 1 to 50

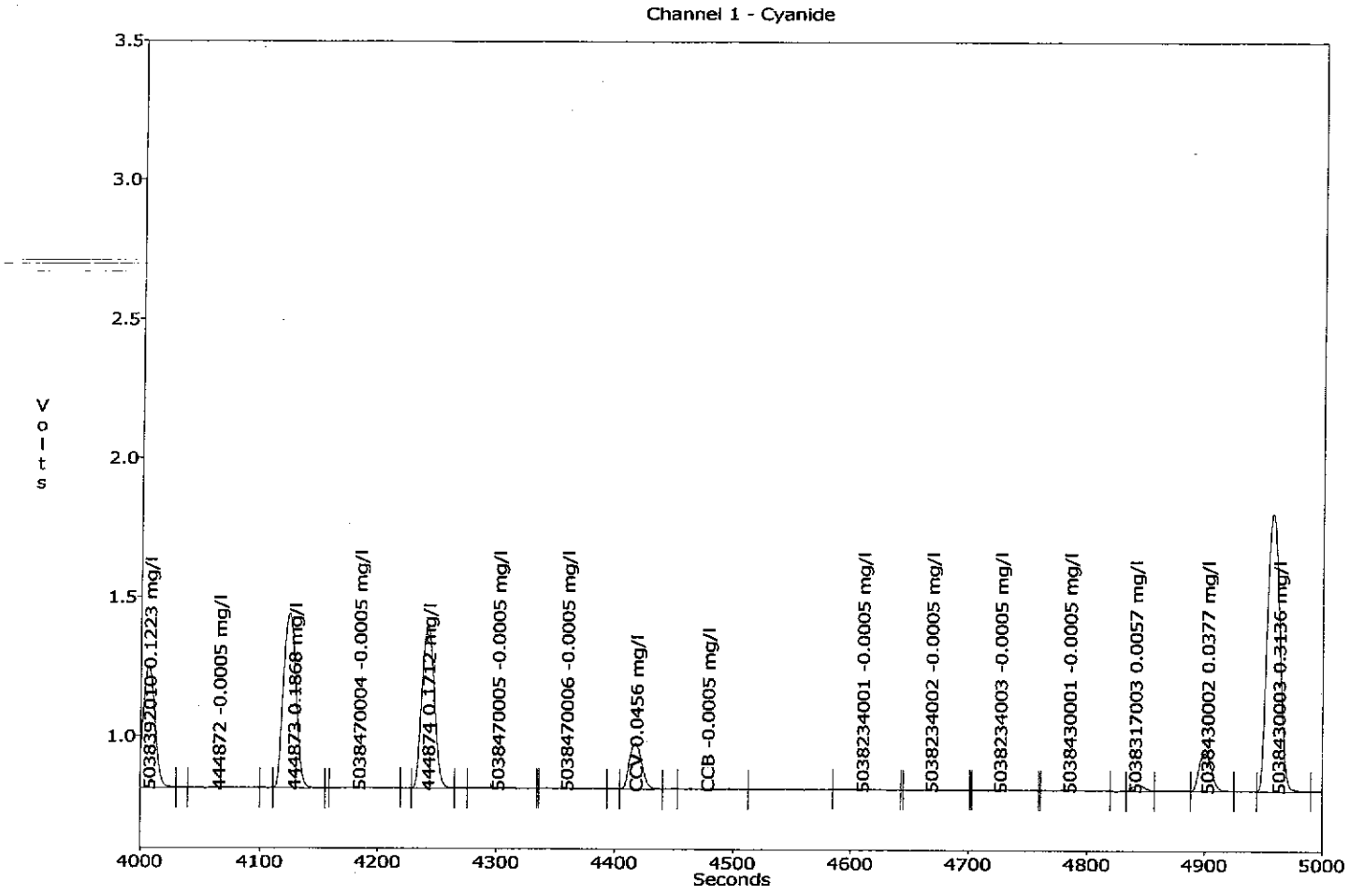
Cup	Sample ID	Sample Type	Sampling Date	Sampling Time	# of Reps	Cyanide (mg/l)	Man Dil Factor
14	CCV	RelChkStd	17 Jun 2010	11:01:06	1	0.0463	1.0
				Known Concentration:		0.0500	
				% Difference:		-7.4155	
14	CCV	RelChkStd	17 Jun 2010	11:13:55	1	0.0470	1.0
				Known Concentration:		0.0500	
				% Difference:		-5.9497	
14	CCV	RelChkStd	17 Jun 2010	11:26:42	1	0.0457	1.0
				Known Concentration:		0.0500	
				% Difference:		-8.6133	
14	CCV	RelChkStd	17 Jun 2010	11:39:37	1	0.0464	1.0
				Known Concentration:		0.0500	
				% Difference:		-7.2552	
14	CCV	RelChkStd	17 Jun 2010	11:52:31	1	0.0456	1.0
				Known Concentration:		0.0500	
				% Difference:		-8.8526	
14	CCV	RelChkStd	17 Jun 2010	12:05:22	1	0.0474	1.0
				Known Concentration:		0.0500	
				% Difference:		-5.2114	
14	CCV	RelChkStd	17 Jun 2010	12:18:23	1	0.0453	1.0
				Known Concentration:		0.0500	
				% Difference:		-9.4200	
14	CCV	RelChkStd	17 Jun 2010	12:31:20	1	0.0454	1.0
				Known Concentration:		0.0500	
				% Difference:		-9.2819	
14	CCV	RelChkStd	17 Jun 2010	12:44:16	1	0.0456	1.0
				Known Concentration:		0.0500	
				% Difference:		-8.8371	
14	CCV	RelChkStd	17 Jun 2010	12:53:24	1	0.0454	1.0
				Known Concentration:		0.0500	
				% Difference:		-9.1991	
15	ICB	AbsChkStd	17 Jun 2010	10:50:27	1	0.0005	1.0
				Known Concentration:		0.0000	
				Difference:		0.0005	
15	CCB	AbsChkStd	17 Jun 2010	11:02:06	1	-0.0005	1.0
				Known Concentration:		0.0000	
				Difference:		-0.0005	
15	CCB	AbsChkStd	17 Jun 2010	11:14:55	1	-0.0005	1.0
				Known Concentration:		0.0000	
				Difference:		-0.0005	
15	CCB	AbsChkStd	17 Jun 2010	11:27:42	1	-0.0005	1.0
				Known Concentration:		0.0000	
				Difference:		-0.0005	
15	CCB	AbsChkStd	17 Jun 2010	11:40:37	1	-0.0005	1.0
				Known Concentration:		0.0000	
				Difference:		-0.0005	
15	CCB	AbsChkStd	17 Jun 2010	11:53:31	1	-0.0005	1.0
				Known Concentration:		0.0000	
				Difference:		-0.0005	
15	CCB	AbsChkStd	17 Jun 2010	12:06:22	1	-0.0005	1.0
				Known Concentration:		0.0000	
				Difference:		-0.0005	
15	CCB	AbsChkStd	17 Jun 2010	12:19:23	1	-0.0005	1.0
				Known Concentration:		0.0000	
				Difference:		-0.0005	
15	CCB	AbsChkStd	17 Jun 2010	12:32:20	1	0.0002	1.0
				Known Concentration:		0.0000	
				Difference:		0.0002	
15	CCB	AbsChkStd	17 Jun 2010	12:45:16	1	-0.0005	1.0
				Known Concentration:		0.0000	
				Difference:		-0.0005	
15	CCB	AbsChkStd	17 Jun 2010	12:54:24	1	-0.0005	1.0
				Known Concentration:		0.0000	
				Difference:		-0.0005	
16	ICV	RelChkStd	17 Jun 2010	10:49:28	1	0.0504	1.0
				Known Concentration:		0.0500	
				% Difference:		0.7767	

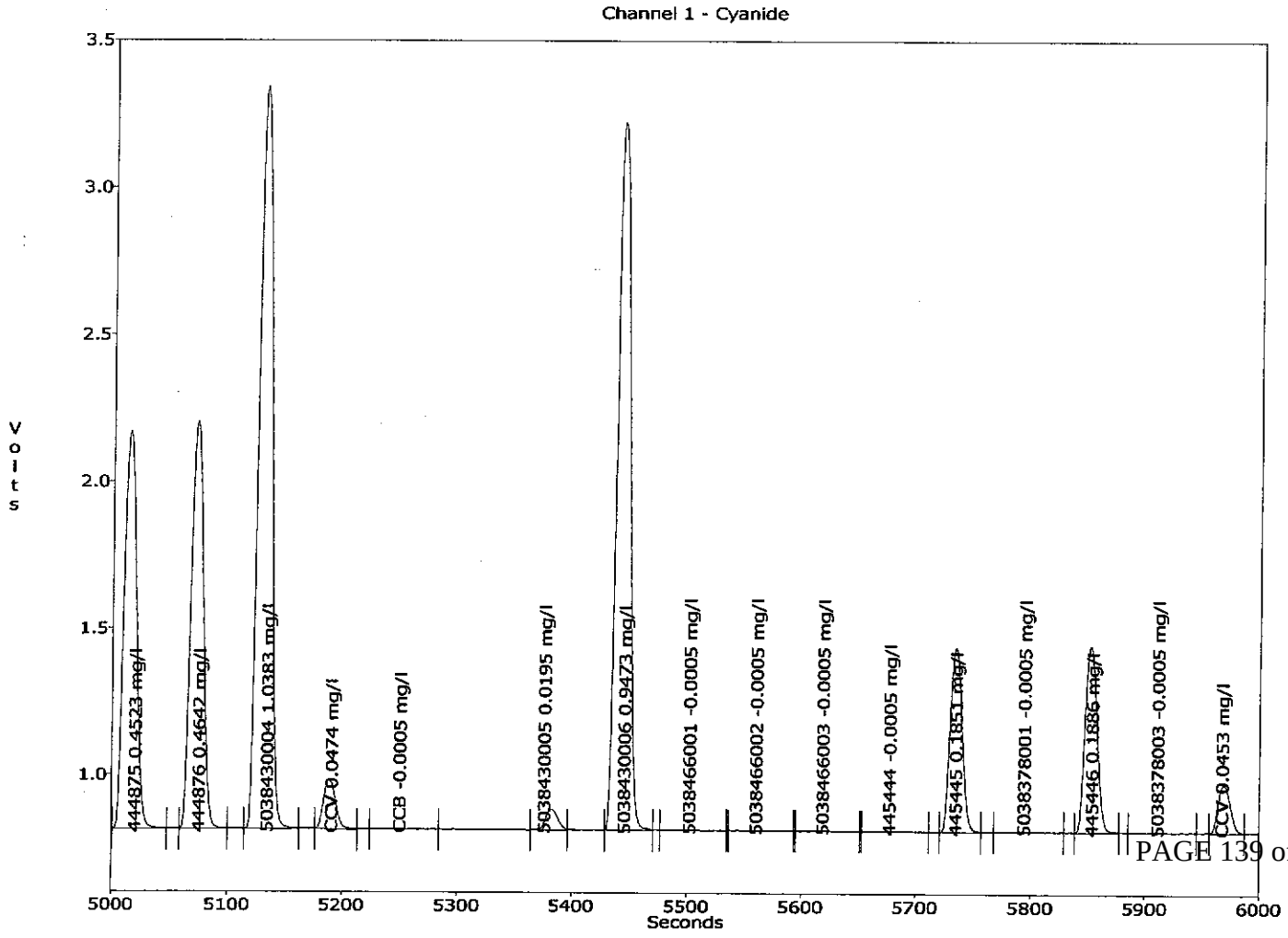

Channel 1 - Cyanide
Volts
3.5
3.0
2.5
2.0
1.5
1.0
0
100
200
300
400
500
600
700
800
900
1000
Seconds
Channel 1 - Cyanide
std #1 0.5mg/l 18462160 (Area)
sdt #2 0.2mg/l 8229664 (Area)
std #3 0.1mg/l 4283511 (Area)
std #4 0.05mg/l 2209797 (Area)
std #5 0.02mg/l 912366 (Area)
std #6 0.01mg/l 474621 (Area)
std #7 0.005mg/l 283106 (Area)
std #8 0.00mg/l 0 (Area)
ICV 0.0504 mg/l
ICB 0.0005 mg/l
444887 0.0006 mg/l
444888 0.2091 mg/l
5038203001 0.0012 mg/l
444889 0.1902 mg/l
5038203002 0.0054 mg/l

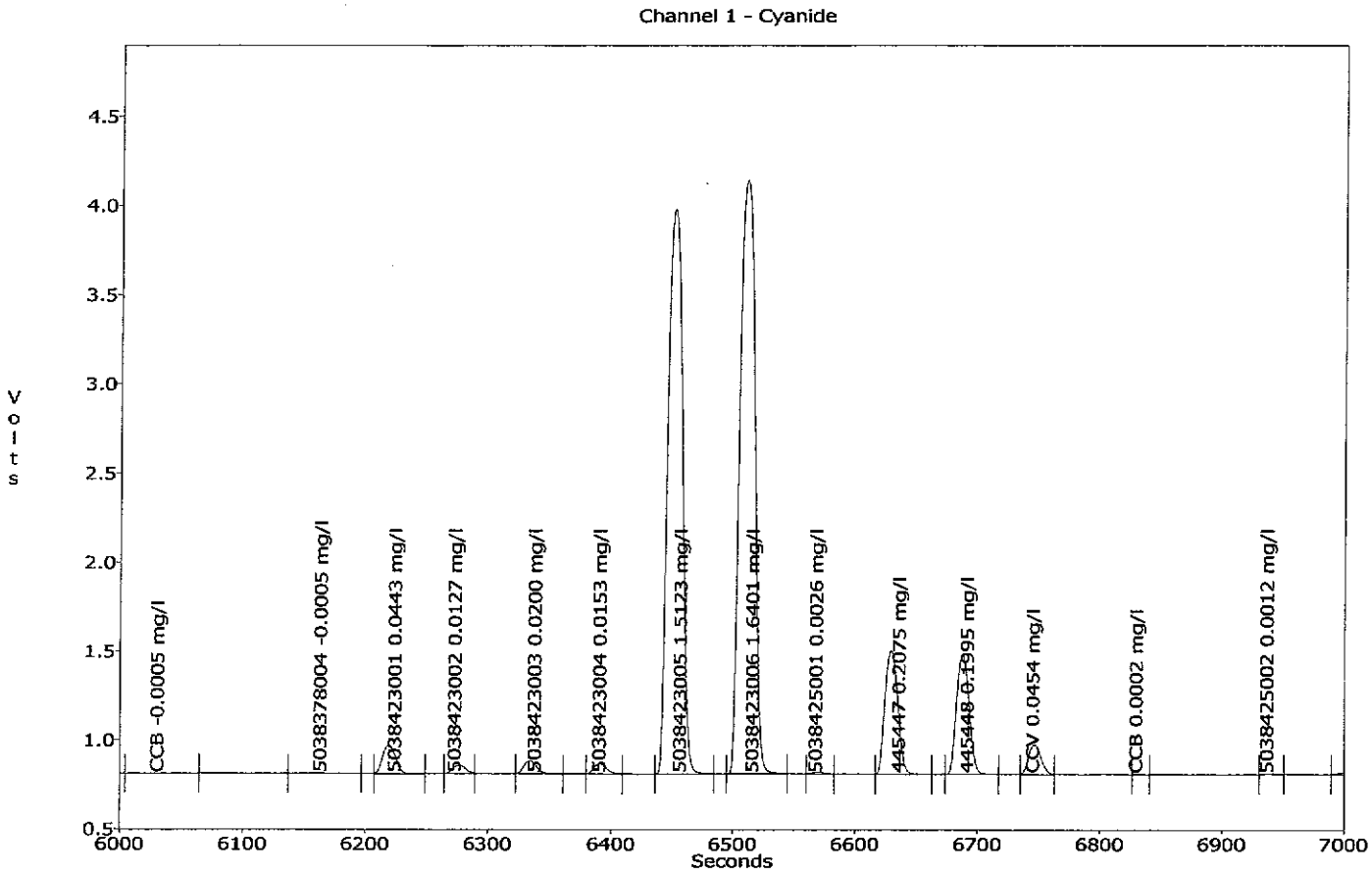

Volts
3.5
3.0
2.5
2.0
1.5
1.0
1000
1100
1200
1300
1400
1500
1600
1700
1800
1900
2000
Seconds
5038203003 0.0011 mg/l
5038203004 -0.0005 mg/l
5038203005 0.0012 mg/l
444890 0.1955 mg/l
444891 0.1965 mg/l
CCV 0.0463 mg/l
CCB -0.0005 mg/l
5038203006 0.0003 mg/l
5038353003 0.0220 mg/l
5038464001 0.0153 mg/l
5038464002 0.0055 mg/l
5038464003 0.0033 mg/l
5038464004 0.0579 mg/l
5038464005 1.4456 mg/l
5038464006 0.0866 mg/l
5038464007 0.0710 mg/l

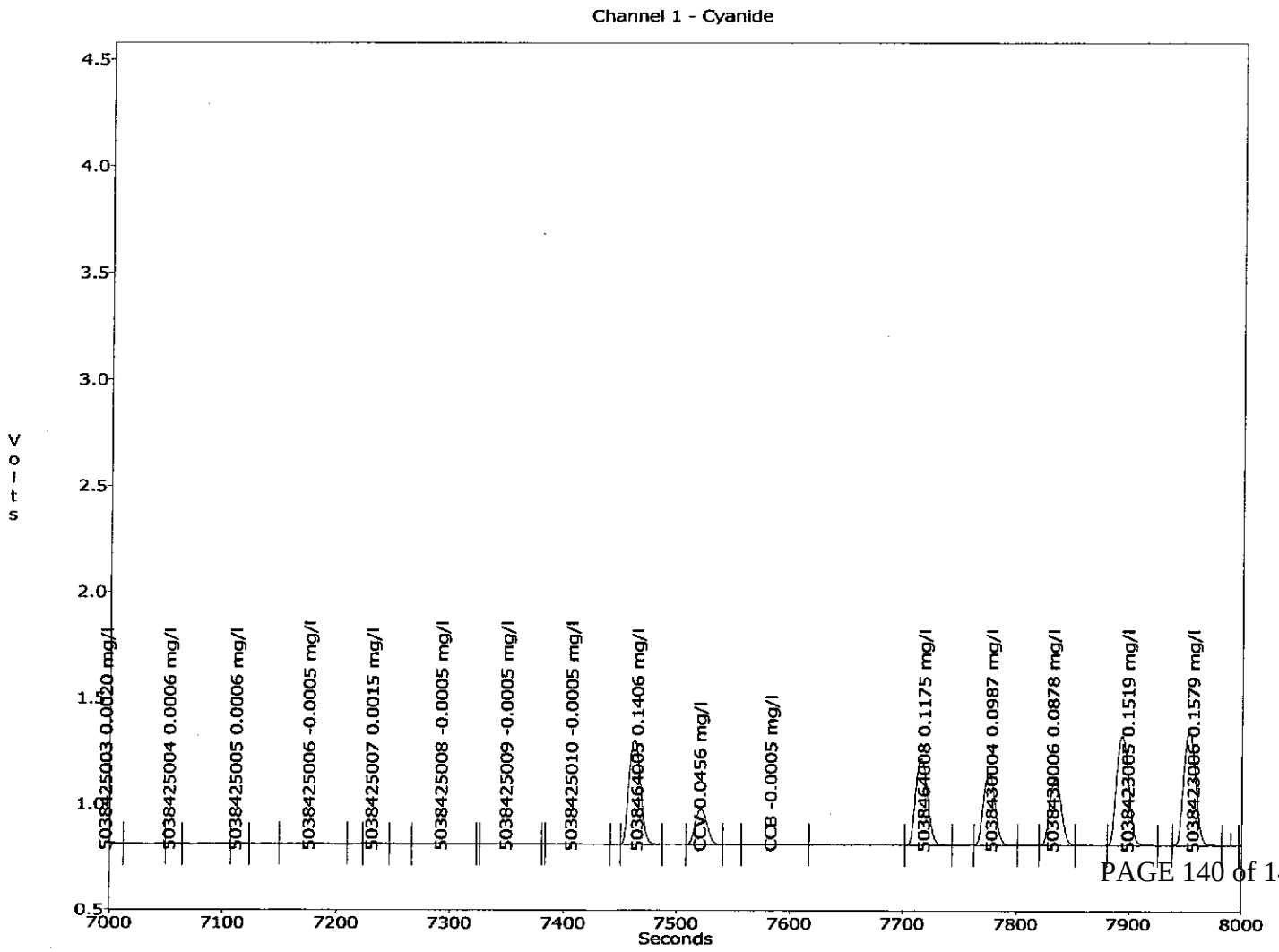

Channel 1 - Cyanide
Volts
Seconds
5038464008 1.2434 mg/l
CCV 0.0470 mg/l
CCB -0.0005 mg/l
445143 -0.0005 mg/l
445144 0.1984 mg/l
5038344001 0.0006 mg/l
445145 0.1916 mg/l
5038344002 0.0014 mg/l
5038344003 -0.0005 mg/l
5038344004 -0.0005 mg/l
5038344005 -0.0005 mg/l
5038344006 -0.0005 mg/l
5038344007 -0.0005 mg/l
CCV 0.0457 mg/l
CCB -0.0005 mg/l


Channel 1 - Cyanide
Volts
Seconds
5038344008 -0.0003 mg/l
5038344009 -0.0005 mg/l
5038344010 0.0006 mg/l
5038392001 0.0020 mg/l
445147 0.1975 mg/l
5038392002 -0.0005 mg/l
5038392003 0.0020 mg/l
5038392004 0.0241 mg/l
5038392005 0.1304 mg/l
5038392006 0.1001 mg/l
CCV 0.0464 mg/l
CCB -0.0005 mg/l
5038392007 0.0733 mg/l
5038392008 0.0207 mg/l
5038392009 0.0122 mg/l


Channel 1 - Cyanide
Volts
Seconds
5038392010 0.1223 mg/l
444872 -0.0005 mg/l
444873 0.1868 mg/l
5038470004 -0.0005 mg/l
444874 0.1712 mg/l
5038470005 -0.0005 mg/l
5038470006 -0.0005 mg/l
CCV 0.0456 mg/l
CCB -0.0005 mg/l
5038234001 -0.0005 mg/l
5038234002 -0.0005 mg/l
5038234003 -0.0005 mg/l
5038430001 -0.0005 mg/l
5038317003 0.0057 mg/l
5038430002 0.0377 mg/l
5038430003 0.3136 mg/l

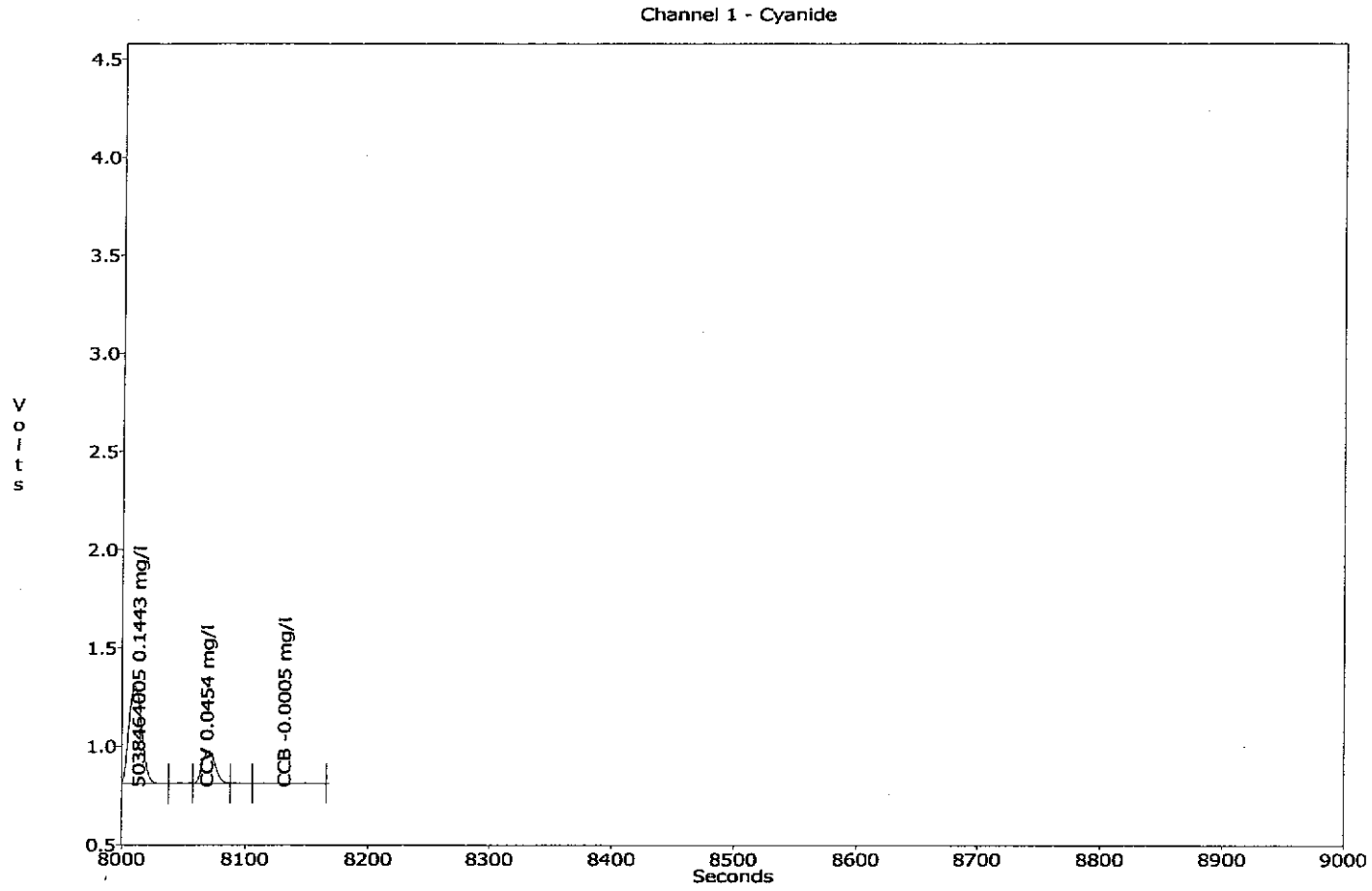

Channel 1 - Cyanide
Volts
Seconds
444875 0.4523 mg/l
444876 0.4642 mg/l
5038430004 1.0383 mg/l
CCV 0.0474 mg/l
CCB -0.0005 mg/l
5038430005 0.0195 mg/l
5038430006 0.9473 mg/l
5038466001 -0.0005 mg/l
5038466002 -0.0005 mg/l
5038466003 -0.0005 mg/l
445444 -0.0005 mg/l
445445 0.1851 mg/l
5038378001 -0.0005 mg/l
445446 0.1886 mg/l
5038378003 -0.0005 mg/l
CCV 0.0453 mg/l

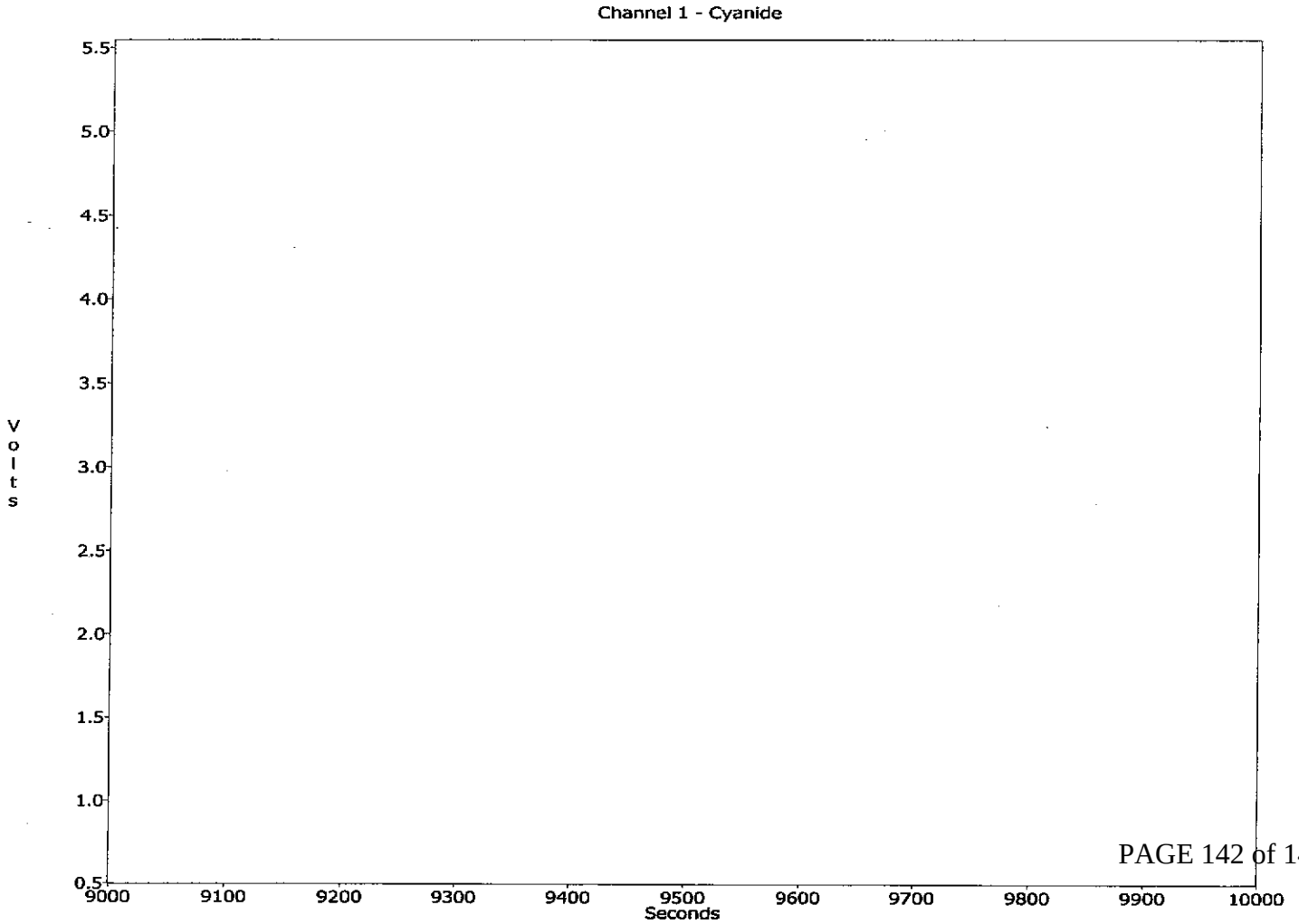

Channel 1 - Cyanide
Volts
Seconds
CCB -0.0005 mg/l
5038378004 -0.0005 mg/l
5038423001 0.0443 mg/l
5038423002 0.0127 mg/l
5038423003 0.0200 mg/l
5038423004 0.0153 mg/l
5038423005 1.5123 mg/l
5038423006 1.6401 mg/l
5038425001 0.0026 mg/l
445447 0.2075 mg/l
445448 0.1995 mg/l
CCV 0.0454 mg/l
CCB 0.0002 mg/l
5038425002 0.0012 mg/l


Channel 1 - Cyanide
Volts
Seconds
5038425003 0.0020 mg/l
5038425004 0.0006 mg/l
5038425005 0.0006 mg/l
5038425006 -0.0005 mg/l
5038425007 0.0015 mg/l
5038425008 -0.0005 mg/l
5038425009 -0.0005 mg/l
5038425010 -0.0005 mg/l
5038464005 0.1406 mg/l
CCV 0.0456 mg/l
CCB -0.0005 mg/l
5038464008 0.1175 mg/l
5038438004 0.0987 mg/l
5038438006 0.0878 mg/l
5038423005 0.1519 mg/l
5038423006 0.1579 mg/l

Multi-Channel Table
Type: Unknowns
Channel Range: 1 to 8 -- Cup Range: 65 to 110

Cup	Sample ID	Sampling Date	Sampling Time	Rep #	Cyanide (mg/l)	Man Dil Factor
65	5038466003	17 Jun 2010	12:12:31	1	-0.0005	1.0
66	445444	17 Jun 2010	12:13:30	1	-0.0005	1.0
67	445445	17 Jun 2010	12:14:28	1	0.1851	1.0
68	5038378001	17 Jun 2010	12:15:26	1	-0.0005	1.0
69	445446	17 Jun 2010	12:16:25	1	0.1886	1.0
70	5038378003	17 Jun 2010	12:17:23	1	-0.0005	1.0
71	5038378004	17 Jun 2010	12:21:35	1	-0.0005	1.0
72	5038423001	17 Jun 2010	12:22:33	1	0.0443	1.0
73	5038423002	17 Jun 2010	12:23:31	1	0.0127	1.0
74	5038423003	17 Jun 2010	12:24:28	1	0.0200	1.0
75	5038423004	17 Jun 2010	12:25:25	1	0.0153	1.0
76	5038423005	17 Jun 2010	12:26:25	1	1.5123	1.0
77	5038423006	17 Jun 2010	12:27:24	1	1.6401	1.0
78	5038425001	17 Jun 2010	12:28:24	1	0.0026	1.0
79	445447	17 Jun 2010	12:29:23	1	0.2075	1.0
80	445448	17 Jun 2010	12:30:21	1	0.1995	1.0
81	5038425002	17 Jun 2010	12:34:34	1	0.0012	1.0
82	5038425003	17 Jun 2010	12:35:33	1	0.0020	1.0
83	5038425004	17 Jun 2010	12:36:31	1	0.0006	1.0
84	5038425005	17 Jun 2010	12:37:29	1	0.0006	1.0
85	5038425006	17 Jun 2010	12:38:28	1	-0.0005	1.0
86	5038425007	17 Jun 2010	12:39:26	1	0.0015	1.0
87	5038425008	17 Jun 2010	12:40:24	1	-0.0005	1.0
88	5038425009	17 Jun 2010	12:41:22	1	-0.0005	1.0
89	5038425010	17 Jun 2010	12:42:19	1	-0.0005	1.0
90	5038464005	17 Jun 2010	12:43:16	1	0.1406	10.0
90	5038464005	17 Jun 2010	12:52:25	1	0.1443	10.0
91	5038464008	17 Jun 2010	12:47:30	1	0.1175	10.0
92	5038430004	17 Jun 2010	12:48:29	1	0.0987	10.0
93	5038430006	17 Jun 2010	12:49:28	1	0.0878	10.0
94	5038423005	17 Jun 2010	12:50:28	1	0.1519	10.0
95	5038423006	17 Jun 2010	12:51:27	1	0.1579	10.0


Channel 1 - Cyanide
Volts
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
5038464005 0.1443 mg/l
CCV 0.0454 mg/l
CCB -0.0005 mg/l
8000
8100
8200
8300
8400
8500
8600
8700
8800
8900
9000
Seconds


Channel 1 - Cyanide
Volts
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
9000
9100
9200
9300
9400
9500
9600
9700
9800
9900
10000
Seconds

ARCADIS

Attachment 3

Statistical Evaluation of
Background Groundwater Quality

ATTACHMENT C – STATISTICAL EVALUATION OF BACKGROUND GROUNDWATER QUALITY
Closed Hazardous Waste Surface Impoundment
Former Allison Gas Turbine Division – Plant 5
Indianapolis, Indiana

This statistical evaluation was conducted in accordance with Appendix H, Section 4.3 of the Permit in order to evaluate background groundwater quality for the Closed Hazardous Waste Surface Impoundment, General Motors Corporation (GM) Former Allison Gas Turbine (AGT) Division, in Indianapolis, Indiana. The following sections detail the statistical evaluation.

Exploratory Data Analysis

Exploratory data analysis (EDA) techniques were employed to ensure that observations that comprise each dataset (i.e., background and compliance wells) are representative of single populations and to determine if constituents exhibit temporal trends. Statistical evaluations were limited for most indicator parameters by the high percentage of non-detects (NDs) in the data; these limitations are noted in the following sections discussing the EDA techniques and associated results.

Data Processing

Semi-annual groundwater monitoring is ongoing for three downgradient compliance monitoring wells (MW-201B, MW-202B and MW-203B) and one upgradient monitoring well (MW-206B). Analytical results from each well for nine indicator parameters (dissolved arsenic, barium, cadmium, chromium, lead, mercury, silver, selenium and cyanide) are tabulated in **Table 1**. The most recent sixteen (16) valid observations from each well are considered for this evaluation, as specified in the Permit.

Samples taken prior to November 2006 include four (4) replicates for each well/analyte/event. In these cases, the following processing rules were used to generate a single composite result:

1. Where all replicates are ND, the maximum reporting limit is used.
2. Where replicates include one detect and multiple NDs, the detect is used.
3. Where replicates include one ND and multiple detects, the Kaplan Meier mean is used.
4. Where replicates include all detects, the arithmetic mean is used.

Table 2 provides a summary of processed results for the upgradient background well, MW-206B.

Reporting limits for several samples from MW-206B were re-evaluated and updated per Pace Analytical Services, Inc. (letter dated April 28, 2006). These values are indicated with an asterisk (*) in **Table 1** and **Table 2**.

Probability Plots and Goodness-of-Fit Testing

Probability plots are graphics used to inspect for goodness-of-fit (GOF) to probability distributions and the presence of multiple populations and/or potential outliers. As described in Appendix H, Section 4.3.1.2 of the Permit, a probability plot (formatted as a quantile-quantile [Q-Q] plot) was generated for barium in monitoring well MW-206B (**Figure C1**). Datasets for the remaining indicator parameters did not contain sufficient detects to allow for GOF evaluations with statistical tests or probability plots. As shown in

Figure C1, barium likely follows a normal distribution and no potential outliers are present. Statistical GOF testing confirms that barium concentrations are normally distributed, based on the Shapiro-Wilks test at an alpha level of 0.05. These GOF results were used to select the appropriate method for calculating background screening levels (BSLs).

Box Plots

Box plots provide a side-by-side graphical comparison of analytical results for the three downgradient compliance monitoring wells (MW-201B, MW-202B and MW-203B) and one upgradient monitoring well (MW-206B). Box plots were prepared for each indicator parameter in accordance with Appendix H, Section 4.3.1.3 of the Permit and are presented in **Figures C2-1** through **C2-9**. The high percentage of NDs is notable for each parameter. Lead, mercury, and silver were not detected in any monitoring well. With the exception of cadmium and selenium, the remaining indicator parameters were detected at higher concentrations in the background monitoring well MW-206B than the three downgradient compliance monitoring wells.

Trend Analysis

Trend analysis is used to reveal patterns in the data, such as periodic fluctuations (seasonality) or consistent increasing or decreasing trends. A trend analysis was conducted in accordance with Appendix H, Section 4.3.1.4 of the Permit for both compliance and background monitoring wells. Two tests were used to evaluate increasing or decreasing trends at an alpha level of 0.05: Mann-Kendall Test and Sen's Slope Estimator. Both of these tests require a minimum of four detects. The results are presented in **Figure C3**. The minimum number of detects was sufficient to conduct a trend analysis only for barium in MW-206B. Between 1 and 3 detects were observed at MW-206B for arsenic, chromium, selenium, and cyanide. Results were all ND for cadmium, lead, mercury, and silver.

Both the Mann-Kendall and Sen's Slope tests indicate the lack of a discernable temporal trend for the full dataset (November 2002 to June 2010). The p-value for the Mann-Kendall test is 0.34 (i.e., greater than 0.05) and the median slope estimate is essentially 0 mg/L per day. Although there is no statistical evidence of an increasing or decreasing trend for the full dataset, it should be noted that five (5) of the six (6) detected observations occurred in May (the spring sampling event). This result suggests there is likely seasonal variability in barium concentrations in monitoring well MW-206B due to fluctuations in the groundwater elevation. However, there are insufficient detects from fall sampling events to conduct a statistical test for seasonality. A trend analysis performed on only the spring results suggests that barium concentrations have not exhibited a positive trend (Mann-Kendall p=0.32) with concentrations increasing at a rate of 5.7×10^{-6} mg/L per day or approximately 2 µg/L per year since 2003, with a 95% upper confidence limit for the median slope equal to 8 µg/L per year.

Statistical Analysis of Background Data

Analytical data from compliance monitoring wells were compared to background groundwater quality. Concentrations of indicator parameters (dissolved arsenic, barium, cadmium, chromium, lead, mercury, silver, selenium, and cyanide) in upgradient monitoring well MW-206B were used to establish background groundwater quality. There are two conventional approaches for conducting comparisons of compliance data to background data: 1) establish BSLs for point-by-point comparisons (determining if one or more observations from a compliance well exceeds the BSL); and 2) apply hypothesis tests to determine if the overall distributions are the same. This statistical analysis of background was conducted in accordance with Appendix H, Section 4.3.2 of the Permit as summarized below.

Calculation of Background Screening Levels

BSLs were calculated for each indicator parameter in accordance with Appendix H, Section 4.3.2.3 of the Permit. Analytical results from upgradient background well MW-206B were used in this calculation. The desired statistic to represent the BSL is a one-sided 95 percent confidence interval for the 99th percentile (95/99 upper tolerance limit [UTL]). The high frequency of NDs precluded calculation of the 95/99 UTL for most datasets. In these cases the BSL was based conservatively on the maximum detected concentration or the maximum reporting limit. The final BSL values are presented in **Table 3**.

Barium was the only dataset containing sufficient detects to calculate a BSL. In accordance with the BSL selection criteria, because this dataset followed a normal distribution and was mildly skewed (σ[ln detects] = 0.133), the Kaplan-Meier 95/99 UTL was used to represent the BSL. Arsenic, chromium, selenium, and cyanide were detected in at least one but fewer than five groundwater samples from MW-206B. The BSL for these parameters was based on the maximum detected concentration. Cadmium, lead, mercury, and silver were not detected in any groundwater samples from MW-206B and as such a plausible upper bound concentration could not be established. For these metals, the maximum reporting limit was used to represent the BSL.

The final BSLs were compared to each discrete observation from the three compliance wells from the June 2010 sampling events. As presented in **Table 3**, the indicator parameters were not detected in the compliance wells during either sampling event. For each parameter, the reporting limits for these NDs were lower than the corresponding BSLs.

Hypothesis Testing

Hypothesis testing was not warranted because the point-by-point comparisons did not identify any exceedances of BSLs for the compliance well. Furthermore, hypothesis testing is not possible on this dataset due to an insufficient number of detects.

TABLE 1

GROUNDWATER ANALYTICAL DATA
CLOSED HAZARDOUS WASTE SURFACE IMPOUNDMENT
FORMER ALLISON GAS TURBINE DIVISION - PLANT 5
INDIANAPOLIS, INDIANA
INR000021436

Monitoring Well	Sample ID	Sample Date	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	Cyanide
MW-201B	MW-201B (A)	05/21/03	<0.0500	<0.100	<0.00500	<0.0500	<0.0500	<0.00200	<0.0100	<0.0500	<0.0200
	MW-201B (B)	05/21/03	<0.0500	<0.100	<0.00500	<0.0500	<0.0500	<0.00200	0.0102	<0.0500	0.0253
	MW-201B (C)	05/21/03	<0.0500	<0.100	<0.00500	<0.0500	<0.0500	<0.00200	<0.0100	<0.0500	<0.0200
	MW-201B (D)	05/21/03	<0.0500	<0.100	<0.00500	<0.0500	<0.0500	<0.00200	<0.0100	<0.0500	<0.0200
	MW-201B (A)	11/19/03	<0.0100	<0.0500	<0.001	<0.0200	<0.005	<0.00200	<0.0100	<0.0100	<0.0200
	MW-201B (B)	11/19/03	<0.0100	<0.0500	<0.001	<0.0200	<0.005	<0.00200	<0.0100	<0.0100	<0.0200
	MW-201B (C)	11/19/03	<0.0100	<0.0500	<0.001	<0.0200	<0.005	<0.00200	<0.0100	<0.0100	<0.0200
	MW-201B (D)	11/19/03	<0.0100	<0.0500	<0.001	<0.0200	<0.005	<0.00200	<0.0100	<0.0100	<0.0200
	MW-201B (A)	05/25/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-201B (B)	05/25/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-201B (C)	05/25/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-201B (D)	05/25/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-201B (A)	11/11/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-201B (B)	11/11/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-201B (C)	11/11/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-201B (D)	11/11/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-201B (A)	05/09/05	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-201B (B)	05/09/05	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-201B (C)	05/09/05	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-201B (D)	05/09/05	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-201B (A)	11/10/05	<0.0100	<0.100	<0.00500	<0.0100	<0.00500	<0.00020	<0.0100	<0.0100	<0.0100
	MW-201B (B)	11/10/05	<0.0100	<0.100	<0.00500	<0.0100	<0.00500	<0.00020	<0.0100	<0.0100	<0.0100
	MW-201B (C)	11/10/05	<0.0100	<0.100	<0.00500	<0.0100	<0.00500	<0.00020	<0.0100	<0.0100	<0.0100
	MW-201B (D)	11/10/05	<0.0100	<0.100	<0.00500	<0.0100	<0.00500	<0.00020	<0.0100	<0.0100	<0.0100
	MW-201B (A)	05/17/06	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0500	<0.0200
	MW-201B (B)	05/17/06	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0500	<0.0200
	MW-201B (C)	05/17/06	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0500	<0.0200
	MW-201B (D)	05/17/06	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0500	<0.0200
	MW-201B (110806)	11/08/06	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0500	<0.0200
	MW-201B (051607)	05/16/07	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0500	<0.0100
	MW-201B (111507)	11/15/07	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0500	<0.0100
	MW-201B (051408)	05/14/08	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0500	<0.0100
	MW-201B (110608)	11/06/08	<0.0100	<0.100	<0.00500	<0.0100	<0.0050	<0.00200	<0.0100	<0.0500	<0.0050
	MW-201B (051409)	05/14/09	<0.0100	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	MW-201B (112309)	05/14/09	<0.0050	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	MW-201B (060410)	06/04/10	<0.0050	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010

TABLE 1

GROUNDWATER ANALYTICAL DATA
CLOSED HAZARDOUS WASTE SURFACE IMPOUNDMENT
FORMER ALLISON GAS TURBINE DIVISION - PLANT 5
INDIANAPOLIS, INDIANA
INR000021436

Monitoring Well	Sample ID	Sample Date	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	Cyanide
MW-202B	MW-202B (A)	05/21/03	<0.0500	<0.100	<0.00500	<0.0500	<0.0500	<0.00200	<0.0100	<0.0500	<0.0200
	MW-202B (B)	05/21/03	<0.0500	<0.100	<0.00500	<0.0500	<0.0500	<0.00200	<0.0100	<0.0500	<0.0200
	MW-202B (C)	05/21/03	<0.0500	<0.100	<0.00500	<0.0500	<0.0500	<0.00200	<0.0100	<0.0500	0.0209
	MW-202B (D)	05/21/03	<0.0500	<0.100	<0.00500	<0.0500	<0.0500	<0.00200	<0.0100	<0.0500	<0.0200
	MW-202B (A)	11/19/03	<0.0100	<0.0500	<0.001	<0.0200	<0.005	<0.00200	<0.0100	<0.0100	<0.0200
	MW-202B (B)	11/19/03	<0.0100	<0.0500	<0.001	<0.0200	<0.005	<0.00200	<0.0100	<0.0100	<0.0200
	MW-202B (C)	11/19/03	<0.0100	<0.0500	<0.001	<0.0200	<0.005	<0.00200	<0.0100	<0.0100	<0.0200
	MW-202B (D)	11/19/03	<0.0100	<0.0500	<0.001	<0.0200	<0.005	<0.00200	<0.0100	<0.0100	<0.0200
	MW-202B (A)	05/25/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-202B (B)	05/25/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-202B (C)	05/25/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-202B (D)	05/25/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-202B (A)	11/11/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-202B (B)	11/11/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-202B (C)	11/11/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-202B (D)	11/11/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-202B (A)	05/09/05	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-202B (B)	05/09/05	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-202B (C)	05/09/05	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-202B (D)	05/09/05	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-202B (A)	11/10/05	<0.0100	<0.100	<0.00500	<0.0100	<0.00500	<0.00020	0.0103	<0.0100	<0.0100
	MW-202B (B)	11/10/05	<0.0100	<0.100	<0.00500	<0.0100	<0.00500	<0.00020	<0.0100	<0.0100	<0.0100
	MW-202B (C)	11/10/05	<0.0100	<0.100	<0.00500	<0.0100	<0.00500	<0.00020	<0.0100	<0.0100	<0.0100
	MW-202B (D)	11/10/05	<0.0100	<0.100	<0.00500	<0.0100	<0.00500	<0.00020	<0.0100	<0.0100	<0.0100
	MW-202B (A)	05/17/06	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0500	<0.0200
	MW-202B (B)	05/17/06	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0500	<0.0200
	MW-202B (C)	05/17/06	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0500	<0.0200
	MW-202B (D)	05/17/06	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0500	<0.0200
	MW-202B (110806)	11/08/06	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0100	<0.0200
	MW-202B (051607)	05/16/07	<0.0100	<0.100	<0.00500	0.0359	<0.0100	<0.00200	<0.0100	<0.0500	<0.0100
	MW-202B (111507)	11/15/07	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0500	<0.0100
	MW-202B (051408)	05/14/08	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0500	<0.0100
	MW-202B (110608)	11/06/08	<0.0100	<0.100	<0.00500	<0.0100	<0.0050	<0.00200	<0.0100	<0.0500	<0.0050
	MW-202B (051409)	05/14/09	<0.0100	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	MW-202B (112309)	11/23/09	<0.0100	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	MW-202B (112309)	06/04/10	<0.0050	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010

TABLE 1

GROUNDWATER ANALYTICAL DATA
CLOSED HAZARDOUS WASTE SURFACE IMPOUNDMENT
FORMER ALLISON GAS TURBINE DIVISION - PLANT 5
INDIANAPOLIS, INDIANA
INR000021436

Monitoring Well	Sample ID	Sample Date	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	Cyanide
MW-203B	MW-203B (A)	05/21/03	<0.0500	<0.100	<0.00500	<0.0500	<0.0500	<0.00200	0.0104	<0.0500	<0.0200
	MW-203B (B)	05/21/03	<0.0500	<0.100	<0.00500	<0.0500	<0.0500	<0.00200	<0.0100	<0.0500	<0.0200
	MW-203B (C)	05/21/03	<0.0500	<0.100	<0.00500	<0.0500	<0.0500	<0.00200	<0.0100	<0.0500	<0.0200
	MW-203B (D)	05/21/03	<0.0500	<0.100	<0.00500	<0.0500	<0.0500	<0.00200	<0.0100	<0.0500	0.0239
	MW-203B (A)	11/19/03	<0.0100	<0.0500	<0.001	<0.0200	<0.005	<0.00200	<0.0100	<0.0100	<0.0200
	MW-203B (B)	11/19/03	<0.0100	<0.0500	<0.001	<0.0200	<0.005	<0.00200	<0.0100	<0.0100	<0.0200
	MW-203B (C)	11/19/03	<0.0100	<0.0500	<0.001	<0.0200	<0.005	<0.00200	<0.0100	<0.0100	<0.0200
	MW-203B (D)	11/19/03	<0.0100	<0.0500	<0.001	<0.0200	<0.005	<0.00200	<0.0100	<0.0100	<0.0200
	MW-203B (A)	05/25/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-203B (B)	05/25/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-203B (C)	05/25/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-203B (D)	05/25/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-203B (A)	11/11/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-203B (B)	11/11/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-203B (C)	11/11/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-203B (D)	11/11/04	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-203B (A)	05/09/05	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-203B (B)	05/09/05	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-203B (C)	05/09/05	<0.0100	<0.0500	0.00132	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-203B (D)	05/09/05	<0.0100	<0.0500	<0.00100	<0.0200	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-203B (A)	11/10/05	<0.0100	<0.100	<0.00500	<0.0100	<0.00500	<0.00020	<0.0100	<0.0100	<0.0100
	MW-203B (B)	11/10/05	<0.0100	<0.100	<0.00500	<0.0100	<0.00500	<0.00020	<0.0100	<0.0100	<0.0100
	MW-203B (C)	11/10/05	<0.0100	<0.100	<0.00500	<0.0100	<0.00500	<0.00020	<0.0100	<0.0100	<0.0100
	MW-203B (D)	11/10/05	<0.0100	<0.100	<0.00500	<0.0100	<0.00500	<0.00020	<0.0100	<0.0100	<0.0100
	MW-203B (A)	05/17/06	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0500	<0.0200
	MW-203B (B)	05/17/06	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0500	<0.0200
	MW-203B (C)	05/17/06	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0500	<0.0200
	MW-203B (D)	05/17/06	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.05	<0.0200
	MW-203B (110806)	11/08/06	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0100	<0.0200
	MW-203B (051607)	05/16/07	<0.0100	<0.100	<0.00500	0.0147	<0.0100	<0.00200	<0.0100	<0.0500	<0.0100
	MW-203B (111507)	11/15/07	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0500	<0.0100
	MW-203B (051408)	05/14/08	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0500	<0.0100
	MW-203B (110608)	11/06/08	<0.0100	<0.100	<0.00500	<0.0100	<0.0050	<0.00200	<0.0100	<0.0500	<0.0050
	MW-203B (051409)	05/14/09	<0.0100	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	MW-203B (112309)	11/23/09	<0.0050	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	MW-203B (060410)	06/04/10	<0.0050	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010

TABLE 1

GROUNDWATER ANALYTICAL DATA
CLOSED HAZARDOUS WASTE SURFACE IMPOUNDMENT
FORMER ALLISON GAS TURBINE DIVISION - PLANT 5
INDIANAPOLIS, INDIANA
INR000021436

Monitoring Well	Sample ID	Sample Date	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	Cyanide
MW-206B	MW-206B (A)	05/21/03	<0.0100*	<0.100	<0.00500	<0.0100*	<0.0500	<0.00200	<0.0100	<0.0500	<0.0200
	MW-206B (B)	05/21/03	<0.0100*	<0.100	<0.00500	<0.0100*	<0.0500	<0.00200	<0.0100	<0.0500	0.214
	MW-206B (C)	05/21/03	<0.0100*	<0.100	<0.00500	<0.0100*	<0.0500	<0.00200	<0.0100	<0.0500	<0.0200
	MW-206B (D)	05/21/03	<0.0100*	<0.100	<0.00500	<0.0100*	<0.0500	<0.00200	<0.0100	<0.0500	<0.0200
	MW-206B (A)	11/19/03	<0.0100	<0.0500	<0.00100	<0.0100*	<0.0050*	<0.00200	<0.0100	<0.0100	<0.0200
	MW-206B (B)	11/19/03	<0.0100	<0.0500	<0.00100	<0.0100*	<0.0050*	<0.00200	<0.0100	<0.0100	<0.0200
	MW-206B (C)	11/19/03	<0.0100	<0.0500	<0.00100	<0.0100*	<0.0050*	<0.00200	<0.0100	<0.0100	<0.0200
	MW-206B (D)	11/19/03	<0.0100	<0.0500	<0.00100	<0.0100*	<0.0050*	<0.00200	<0.0100	<0.0100	<0.0200
	MW-206B (A)	05/25/04	<0.0100	0.0885	<0.00100	<0.0100*	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-206B (B)	05/25/04	<0.0100	0.0884	<0.00100	<0.0100*	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-206B (C)	05/25/04	<0.0100	0.0875	<0.00100	<0.0100*	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-206B (D)	05/25/04	<0.0100	0.0889	<0.00100	<0.0100*	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-206B (A)	11/11/04	<0.0100	<0.0500	<0.00100	<0.0100*	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-206B (B)	11/11/04	<0.0100	<0.0500	<0.00100	<0.0100*	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-206B (C)	11/11/04	<0.0100	<0.0500	<0.00100	<0.0100*	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-206B (D)	11/11/04	<0.0100	<0.0500	<0.00100	<0.0100*	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-206B (A)	05/09/05	<0.0100	0.0989	<0.00100	<0.0100*	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-206B (B)	05/09/05	<0.0100	0.0942	<0.00100	<0.0100*	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-206B (C)	05/09/05	<0.0100	0.0967	<0.00100	<0.0100*	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-206B (D)	05/09/05	0.0162	<0.0500	<0.00100	<0.0100*	<0.00500	<0.00200	<0.0100	<0.0100	<0.0200
	MW-206B (A)	11/10/05	<0.0100	0.0839	<0.00500	<0.0100	<0.00500	<0.00020	<0.0100	<0.0100	<0.0100
	MW-206B (B)	11/10/05	<0.0100	0.0802	<0.00500	<0.0100	<0.00500	<0.00020	<0.0100	<0.0100	<0.0100
	MW-206B (C)	11/10/05	<0.0100	0.0804	<0.00500	<0.0100	<0.00500	<0.00020	0.0114	<0.0100	<0.0100
	MW-206B (D)	11/10/05	<0.0100	0.0793	<0.00500	<0.0100	<0.00500	<0.00020	<0.0100	<0.0100	<0.0100
	MW-206B (A)	05/17/06	<0.0100	0.1	<0.00500	0.0266	<0.0100	<0.00200	<0.0100	<0.0500	<0.0200
	MW-206B (B)	05/17/06	<0.0100	0.0986	<0.00500	0.055	<0.0100	<0.00200	<0.0100	<0.0500	<0.0200
	MW-206B (C)	05/17/06	<0.0100	0.0966	<0.00500	0.0176	<0.0100	<0.00200	<0.0100	<0.0500	<0.0200
	MW-206B (D)	05/17/06	<0.0100	<0.100	<0.00500	0.0140	<0.0100	<0.00200	<0.0100	<0.0500	<0.0200
	MW-206B (110806)	11/08/06	<0.0100	<0.100	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0500	<0.0200
	MW-206B (051607)	05/16/07	<0.0100	0.112	<0.00500	0.0111	<0.0100	<0.00200	<0.0100	<0.0500	<0.0100
	MW-206B (111507)	11/15/07	<0.0100	<0.100	<0.00500	0.0760	<0.0100	<0.00200	<0.0100	<0.0500	<0.0100
	MW-206B (051408)	05/14/08	<0.0100	0.114	<0.00500	<0.0100	<0.0100	<0.00200	<0.0100	<0.0500	<0.0100
	MW-206B (110608)	11/06/08	<0.0100	<0.100	<0.00500	<0.0100	<0.0050	<0.00200	<0.0100	<0.0500	<0.0050
	MW-206B (051409)	05/14/09	<0.0100	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	MW-206B (112309)	05/14/09	<0.0100	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	MW-206B(060410)	06/04/10	<0.0050	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010

Notes: * Re-evaluation of Reporting limits provided by Pace Analytical Services, Inc. (letter dated April 28, 2006)
NA: Reporting limit for non-detect exceeds the Estimated Quantitation Limit established by permit and is excluded from the analysis
-- Sampling event prior to most recent 16 valid observation; data excluded from analysis

TABLE 2

UPGRADIENT MONITORING WELL MW-206B BACKGROUND DATA
CLOSED HAZARDOUS WASTE SURFACE IMPOUNDMENT
FORMER ALLISON GAS TURBINE DIVISION - PLANT 5
INDIANAPOLIS, INDIANA
INR000021436

Monitoring Well	Sample Date	Arsenic	Barium	Cadmium	Chromium	Lead	Mercury	Selenium	Silver	Cyanide
MW-206B	5/21/2003	<0.0100*	<0.100	<0.0050	<0.0100*	<0.0100	<0.0020	<0.0100	<0.0500	0.214
	11/19/2003	<0.0100	<0.0500	<0.0010	<0.0100*	<0.0050*	<0.0020	<0.0100	<0.0100	<0.0200
	5/25/2004	<0.0100	0.088325	<0.0010	<0.0100*	<0.0050	<0.0020	<0.0100	<0.0100	<0.0200
	11/11/2004	<0.0100	<0.0500	<0.0010	<0.0100*	<0.0050	<0.0020	<0.0100	<0.0100	<0.0200
	5/9/2005	<0.0100	0.096	<0.0010	<0.0100*	<0.0050	<0.0020	<0.0100	<0.0100	<0.0200
	11/10/2005	<0.0100	0.08095	<0.0050	<0.0100	<0.0050	<0.0002	0.0114	<0.0100	<0.0100
	5/17/2006	<0.0100	0.0982	<0.0050	0.0283	<0.0100	<0.0020	<0.0100	<0.0500	<0.0200
	11/8/2006	<0.0100	<0.100	<0.0050	<0.0100	<0.0100	<0.0020	<0.0100	<0.0500	<0.0200
	5/16/2007	<0.0100	0.112	<0.0050	0.0111	<0.0100	<0.0020	<0.0100	<0.0500	<0.0100
	11/15/2007	<0.0100	<0.100	<0.0050	0.076	<0.0100	<0.0020	<0.0100	<0.0500	<0.0100
	5/14/2008	<0.0100	0.114	<0.0050	<0.0100	<0.0100	<0.0020	<0.0100	<0.0500	<0.0100
	11/6/2008	<0.0100	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.0050
	11/6/2008	<0.0100	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.0050
	5/14/2009	<0.0100	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	11/23/2009	<0.0050	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	6/4/2010	<0.0050	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
Estimated Quantitation Limit		**0.0100**	**0.100**	**0.0050**	**0.0100**	**0.0100**	**0.0020**	**0.0100**	**0.0500**	**0.0200**

Notes: * Re-evaluation of Reporting limits provided by Pace Analytical Services, Inc. (letter dated April 28, 2006)

TABLE 3

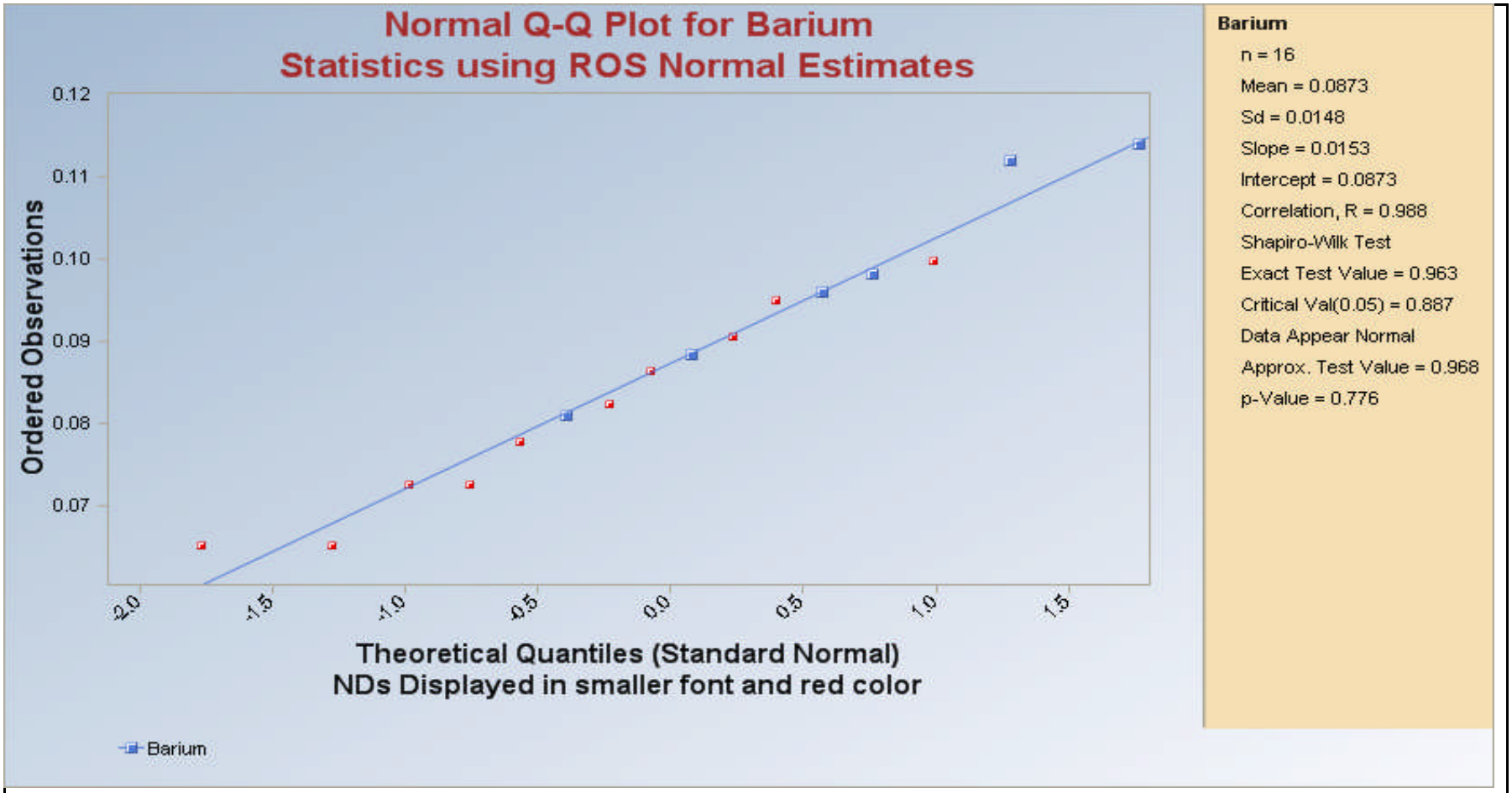
BACKGROUND SCREENING LEVELS
CLOSED HAZARDOUS WASTE SURFACE IMPOUNDMENT
FORMER ALLISON GAS TURBINE DIVISION - PLANT 5
INDIANAPOLIS, INDIANA
INR000021436

Analyte	Background Wells (MW-206B)					Compliance Wells (MW-201B, -202B, -203B)			
	Detects / N	Maximum (mg/L)	95/99 UTL (mg/L)	Method	BSL (mg/L) [1]	Maximum (mg/L)	Well	2010 Sampling Dates	> BSL ?
Arsenic	2 / 16	0.037	NA	NA	0.04	< 0.005	All 3 wells	6/4/10	No
Barium	6 / 16	0.114	0.128	Kaplan-Meier [2]	0.13	< 0.1	All 3 wells	6/4/10	No
Cadmium	0 / 16	< 0.005	NA	NA	0.01	< 0.005	All 3 wells	6/4/10	No
Chromium	3 / 16	0.076	NA	NA	0.08	< 0.01	All 3 wells	6/4/10	No
Lead	0 / 16	< 0.01	NA	NA	0.01	< 0.005	All 3 wells	6/4/10	No
Mercury	0 / 16	< 0.002	NA	NA	0.00	< 0.002	All 3 wells	6/4/10	No
Selenium	1 / 16	0.0114	NA	NA	0.01	< 0.01	All 3 wells	6/4/10	No
Silver	0 / 16	< 0.05	NA	NA	0.05	< 0.05	All 3 wells	6/4/10	No
Cyanide	1 / 16	0.214	NA	NA	0.21	< 0.01	All 3 wells	6/4/10	No

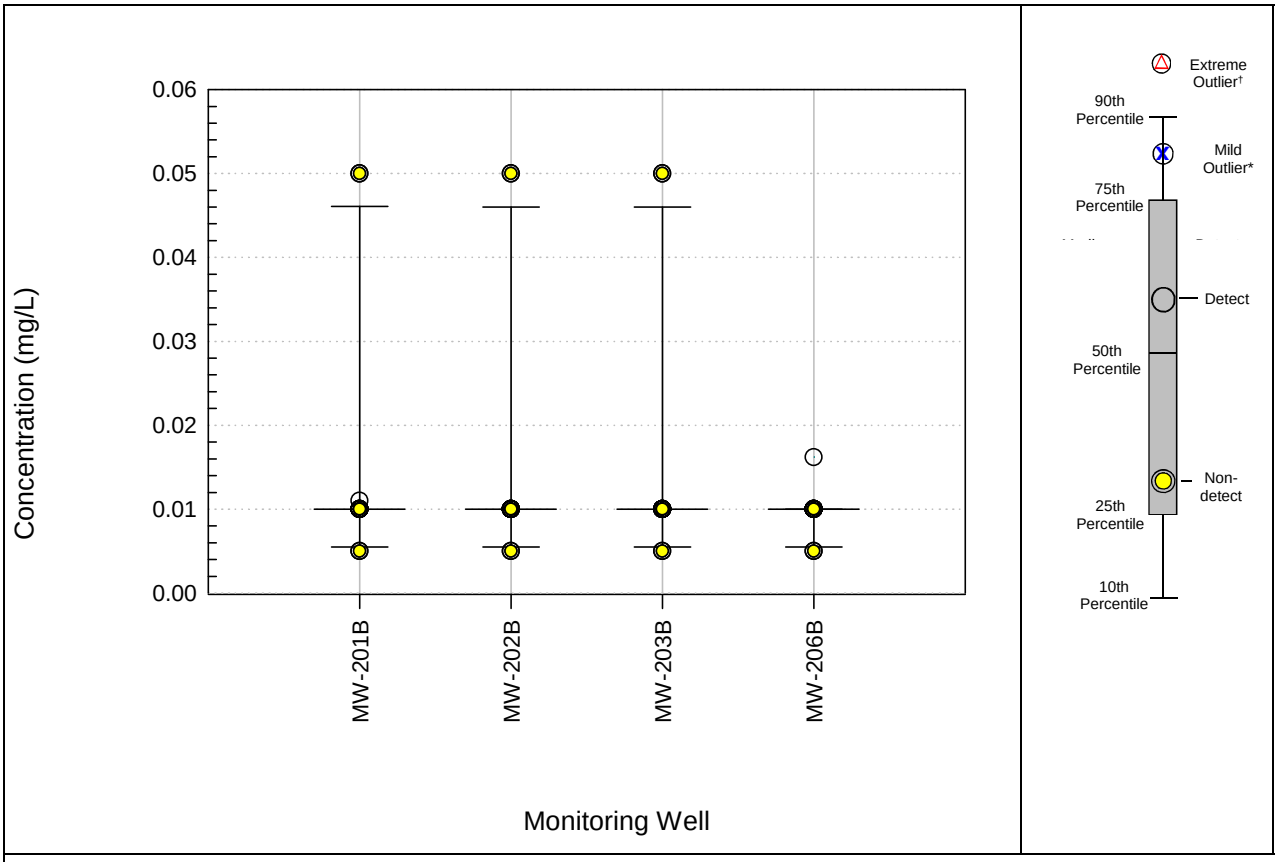
Abbreviations:
< = nondetect, value equal to estimated quantitation limit (EQL)
95/99 UTL = upper tolerance limit based on upper 95 percent confidence interval for 99th percentile
BSL = background screening level
N = sample size

Notes:

[1] If detects = 0, the maximum reporting limit of nondetects is used as the BSL. If detects < 5, BSL = maximum detect. If detects ≥ 5, BSL= 95/99 UTL.
[2] Data are left censored with n=16 and detects = 6, normally distributed with mild skew (standard deviation of log of detects ≤ 1), which supports use of Kaplan-Meier 95/99 UTL instead of a Poisson UTL.



ARCADIS	**Normal Q-Q Plot – Barium in Monitoring Well 206B** Closed Hazardous Waste Surface Impoundment Former Allison Gas Turbine Division - Plant 5 Indianapolis, Indiana	**Figure C1**



ARCADIS

Box and Whisker Plot
Arsenic
Closed Hazardous Waste Surface Impoundment, Former Allison Gas Turbine Division - Plant 5
Indianapolis, Indiana

Figure C2-1

Monitoring Well	Units	Sample Size			ND Range		Detects					Percentiles (All Data)		
		NDs	Detects	Total	Min	Max	Min	Max	Mean	Median	SD	25th	50th	75th
MW-201B	mg/L	15	1	16	0.005	0.05	0.01	0.01	0.01	0.01	ND	0.01	0.01	0.01
MW-202B	mg/L	16	0	16	0.005	0.05	ND	ND	ND	ND	ND	0.01	0.01	0.01
MW-203B	mg/L	16	0	16	0.005	0.05	ND	ND	ND	ND	ND	0.01	0.01	0.01
MW-206B	mg/L	15	1	16	0.005	0.01	0.02	0.02	0.02	0.02	ND	0.01	0.01	0.01

Notes:

† Result value is < 25th percentile - 3*IQR or > 75th percentile + 3*IQR

* Result value is < 25th percentile - 1.5*IQR or > 75th percentile + 1.5*IQR

-- = no data

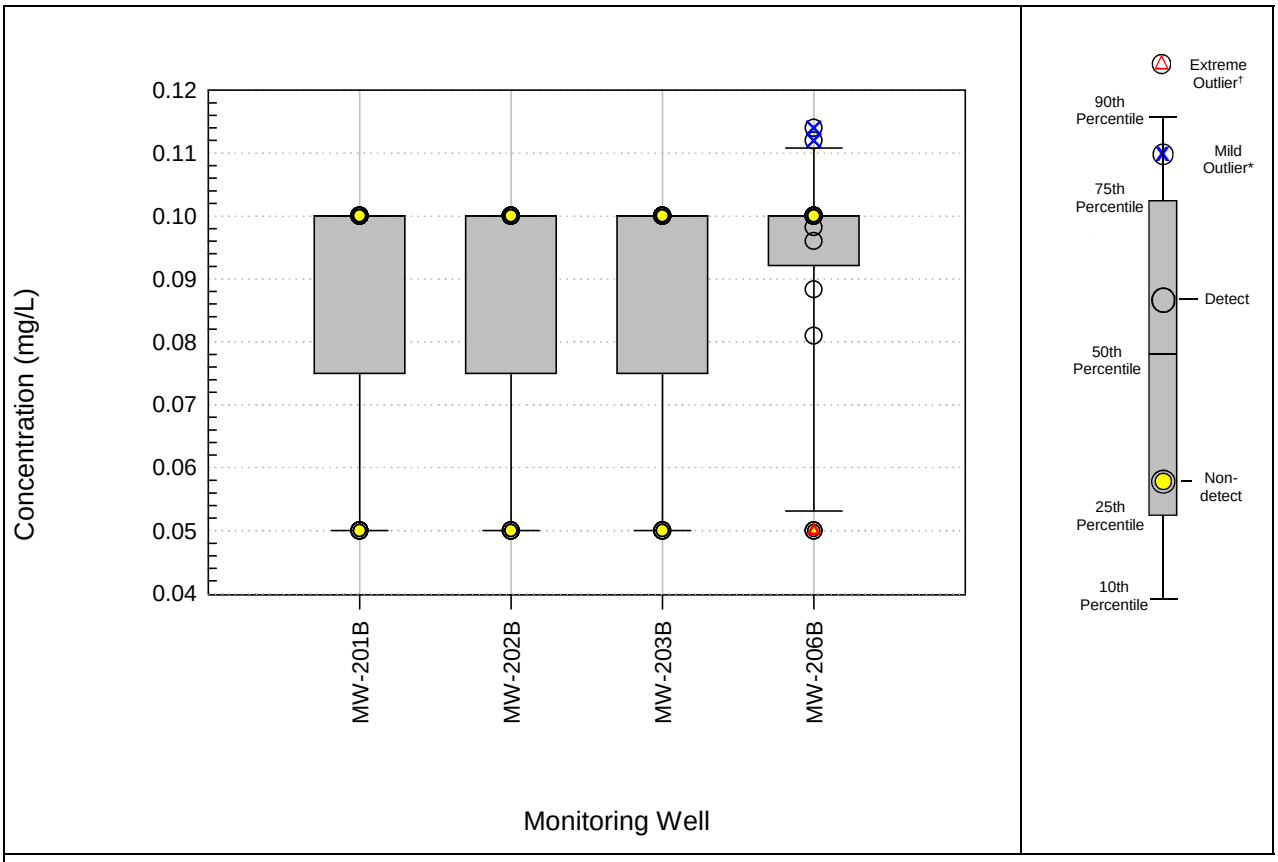
NA = value not applicable due to frequency of detection

ND = non-detect

IQR = interquartile range equals the 3rd quartile (75th percentile) - 1st quartile (25th percentile)

Reporting limit is used for non-detects unless otherwise noted.

Values less than 10 are reported to 2 significant figures. Values greater than 10 are reported to 3 significant figures.



ARCADIS

Box and Whisker Plot
Barium

Closed Hazardous Waste Surface Impoundment, Former Allison Gas Turbine Division - Plant 5
Indianapolis, Indiana

Figure C2-2

Monitoring Well	Units	Sample Size			ND Range		Detects					Percentiles (All Data)		
		NDs	Detects	Total	Min	Max	Min	Max	Mean	Median	SD	25th	50th	75th
MW-201B	mg/L	16	0	16	0.05	0.10	ND	ND	ND	ND	ND	0.08	0.10	0.10
MW-202B	mg/L	16	0	16	0.05	0.10	ND	ND	ND	ND	ND	0.08	0.10	0.10
MW-203B	mg/L	16	0	16	0.05	0.10	ND	ND	ND	ND	ND	0.08	0.10	0.10
MW-206B	mg/L	10	6	16	0.05	0.10	0.08	0.11	0.10	0.10	0.01	0.09	0.10	0.10

Notes:

† Result value is < 25th percentile - 3*IQR or > 75th percentile + 3*IQR

* Result value is < 25th percentile - 1.5*IQR or > 75th percentile + 1.5*IQR

-- = no data

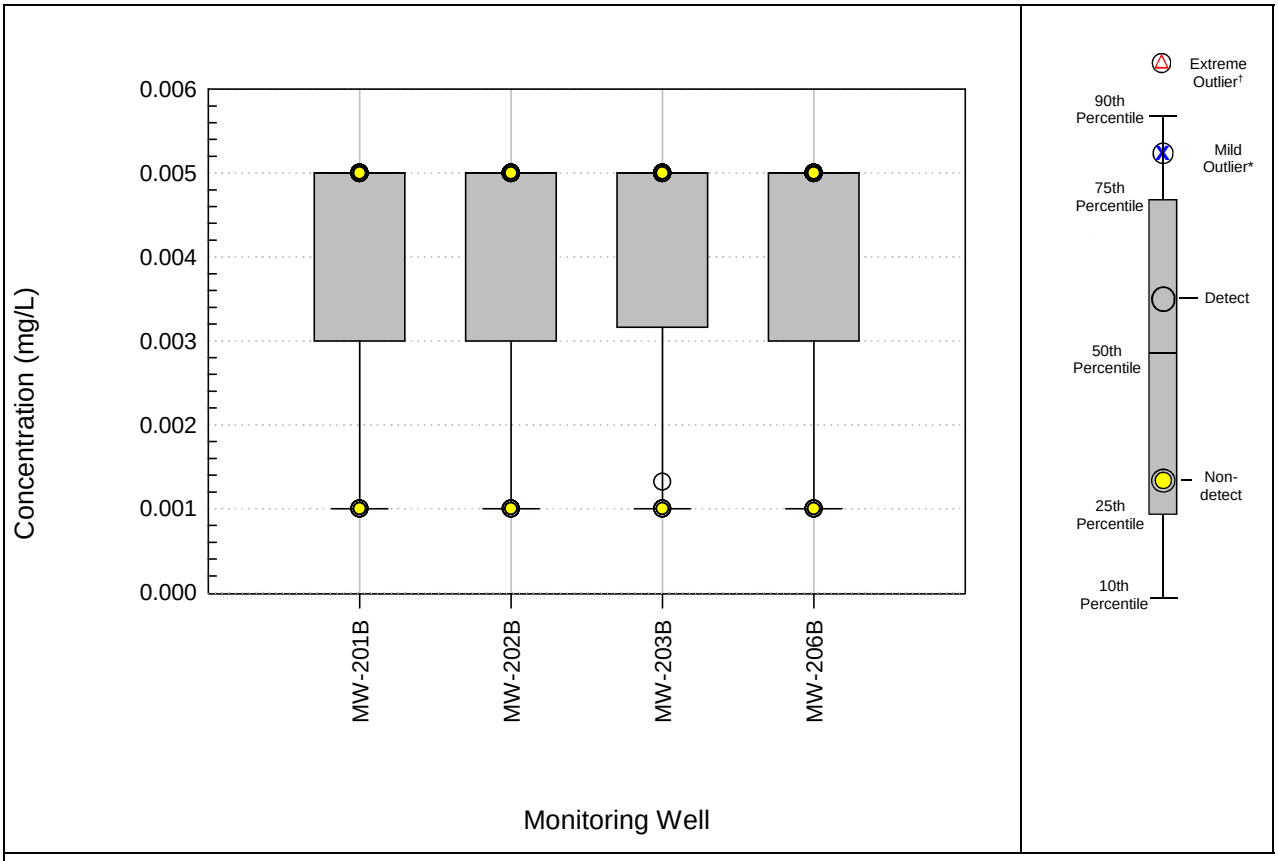
NA = value not applicable due to frequency of detection

ND = non-detect

IQR = interquartile range equals the 3rd quartile (75th percentile) - 1st quartile (25th percentile)

Reporting limit is used for non-detects unless otherwise noted.

Values less than 10 are reported to 2 significant figures. Values greater than 10 are reported to 3 significant figures.



ARCADIS

Box and Whisker Plot
Cadmium

Closed Hazardous Waste Surface Impoundment, Former Allison Gas Turbine Division - Plant 5
Indianapolis, Indiana

Figure C2-3

Monitoring Well	Units	Sample Size			ND Range		Detects					Percentiles (All Data)		
		NDs	Detects	Total	Min	Max	Min	Max	Mean	Median	SD	25th	50th	75th
MW-201B	mg/L	16	0	16	0.001	0.005	ND	ND	ND	ND	ND	0.003	0.005	0.005
MW-202B	mg/L	16	0	16	0.001	0.005	ND	ND	ND	ND	ND	0.003	0.005	0.005
MW-203B	mg/L	15	1	16	0.001	0.005	0.0013	0.0013	0.0013	0.0013	ND	0.0032	0.005	0.005
MW-206B	mg/L	16	0	16	0.001	0.005	ND	ND	ND	ND	ND	0.003	0.005	0.005

Notes:

† Result value is < 25th percentile - 3*IQR or > 75th percentile + 3*IQR

* Result value is < 25th percentile - 1.5*IQR or > 75th percentile + 1.5*IQR

-- = no data

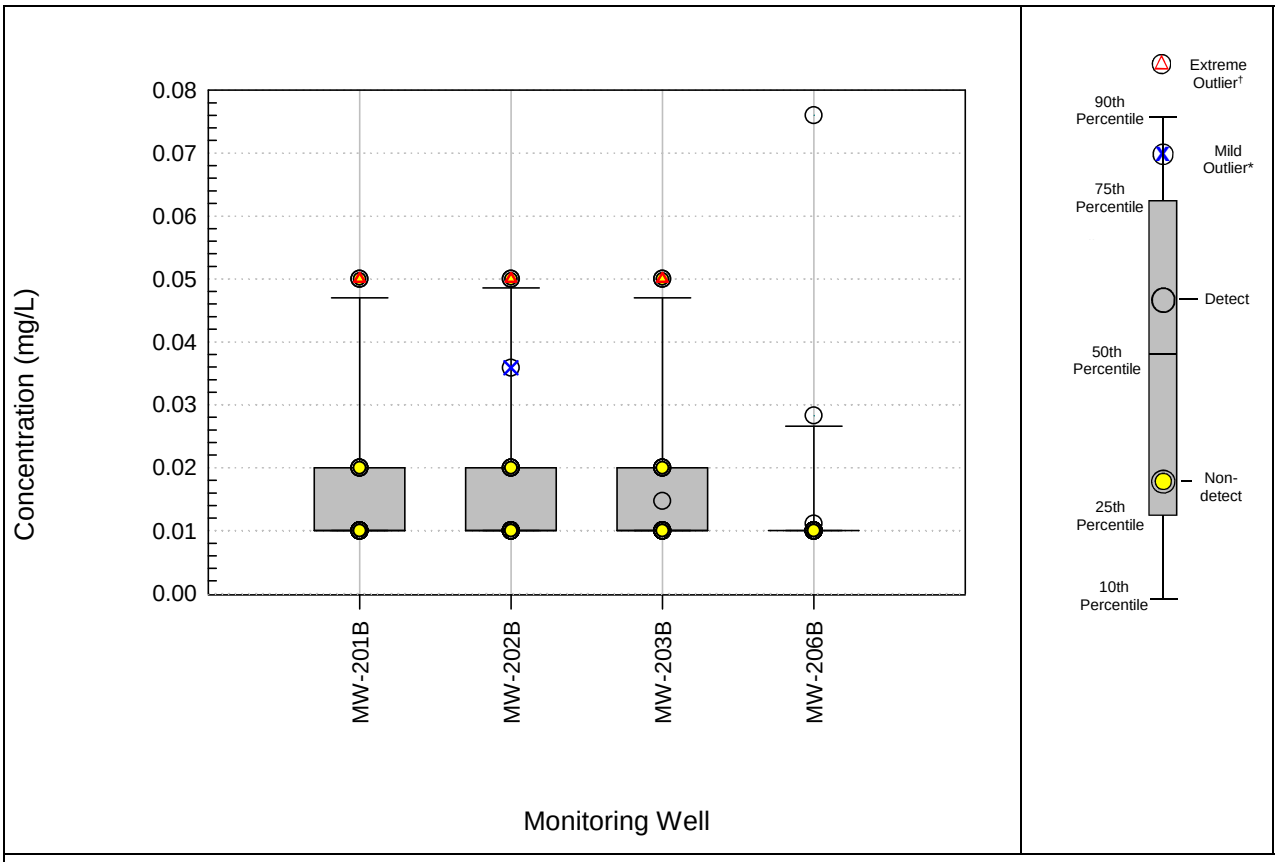
NA = value not applicable due to frequency of detection

ND = non-detect

IQR = interquartile range equals the 3rd quartile (75th percentile) - 1st quartile (25th percentile)

Reporting limit is used for non-detects unless otherwise noted.

Values less than 10 are reported to 2 significant figures. Values greater than 10 are reported to 3 significant figures.



ARCADIS

Box and Whisker Plot
Chromium

Closed Hazardous Waste Surface Impoundment, Former Allison Gas Turbine Division - Plant 5
Indianapolis, Indiana

Figure C2-4

Monitoring Well	Units	Sample Size			ND Range		Detects					Percentiles (All Data)		
		NDs	Detects	Total	Min	Max	Min	Max	Mean	Median	SD	25th	50th	75th
MW-201B	mg/L	16	0	16	0.01	0.05	ND	ND	ND	ND	ND	0.01	0.01	0.02
MW-202B	mg/L	15	1	16	0.01	0.05	0.04	0.04	0.04	0.04	ND	0.01	0.01	0.02
MW-203B	mg/L	15	1	16	0.01	0.05	0.02	0.02	0.02	0.02	ND	0.01	0.01	0.02
MW-206B	mg/L	13	3	16	0.01	0.01	0.01	0.08	0.04	0.03	0.03	0.01	0.01	0.01

Notes:

† Result value is < 25th percentile - 3*IQR or > 75th percentile + 3*IQR

* Result value is < 25th percentile - 1.5*IQR or > 75th percentile + 1.5*IQR

-- = no data

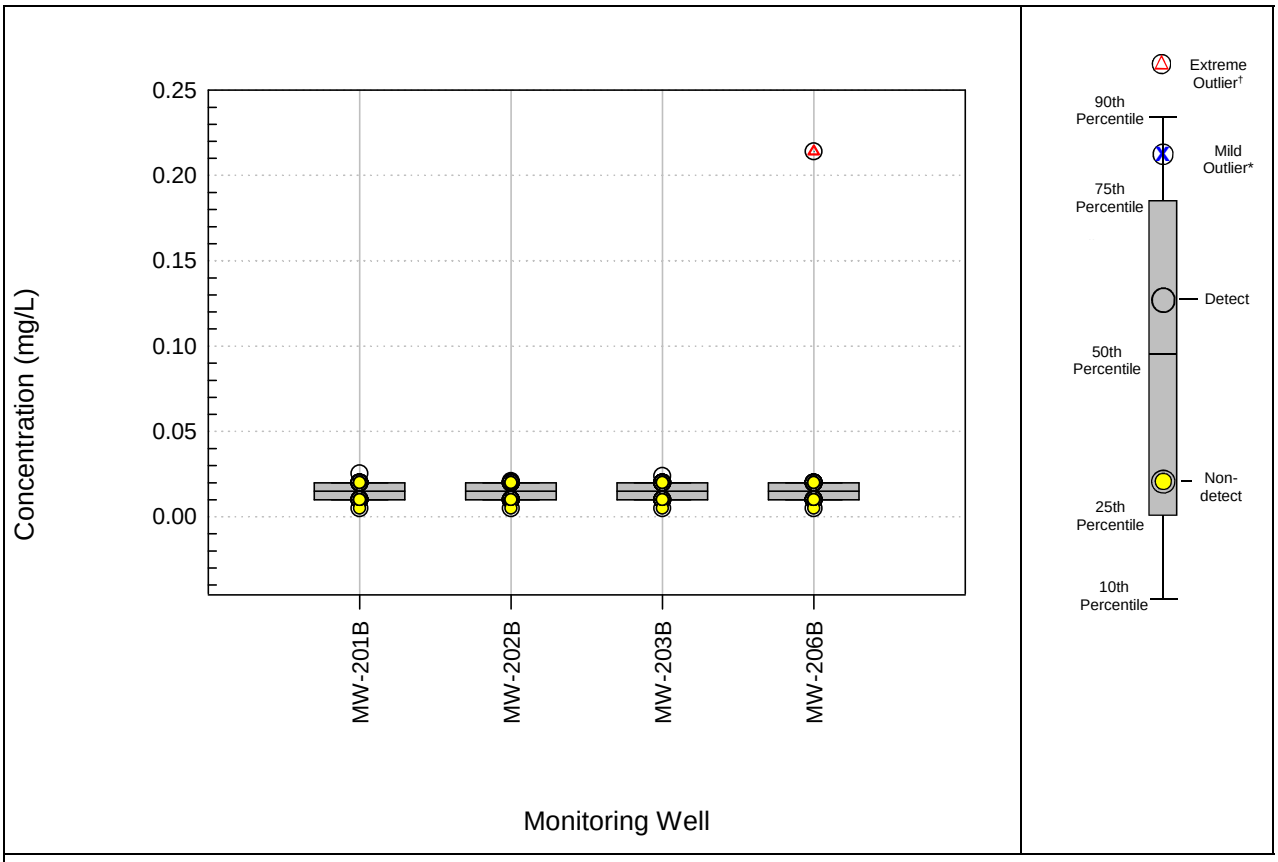
NA = value not applicable due to frequency of detection

ND = non-detect

IQR = interquartile range equals the 3rd quartile (75th percentile) - 1st quartile (25th percentile)

Reporting limit is used for non-detects unless otherwise noted.

Values less than 10 are reported to 2 significant figures. Values greater than 10 are reported to 3 significant figures.



ARCADIS

Box and Whisker Plot
Cyanide

Closed Hazardous Waste Surface Impoundment, Former Allison Gas Turbine Division - Plant 5
Indianapolis, Indiana

Figure C2-5

Monitoring Well	Units	Sample Size			ND Range		Detects					Percentiles (All Data)		
		NDs	Detects	Total	Min	Max	Min	Max	Mean	Median	SD	25th	50th	75th
MW-201B	mg/L	15	1	16	0.005	0.02	0.03	0.03	0.03	0.03	ND	0.01	0.02	0.02
MW-202B	mg/L	15	1	16	0.005	0.02	0.02	0.02	0.02	0.02	ND	0.01	0.02	0.02
MW-203B	mg/L	15	1	16	0.005	0.02	0.02	0.02	0.02	0.02	ND	0.01	0.02	0.02
MW-206B	mg/L	15	1	16	0.005	0.02	0.21	0.21	0.21	0.21	ND	0.01	0.02	0.02

Notes:

† Result value is < 25th percentile - 3*IQR or > 75th percentile + 3*IQR

* Result value is < 25th percentile - 1.5*IQR or > 75th percentile + 1.5*IQR

-- = no data

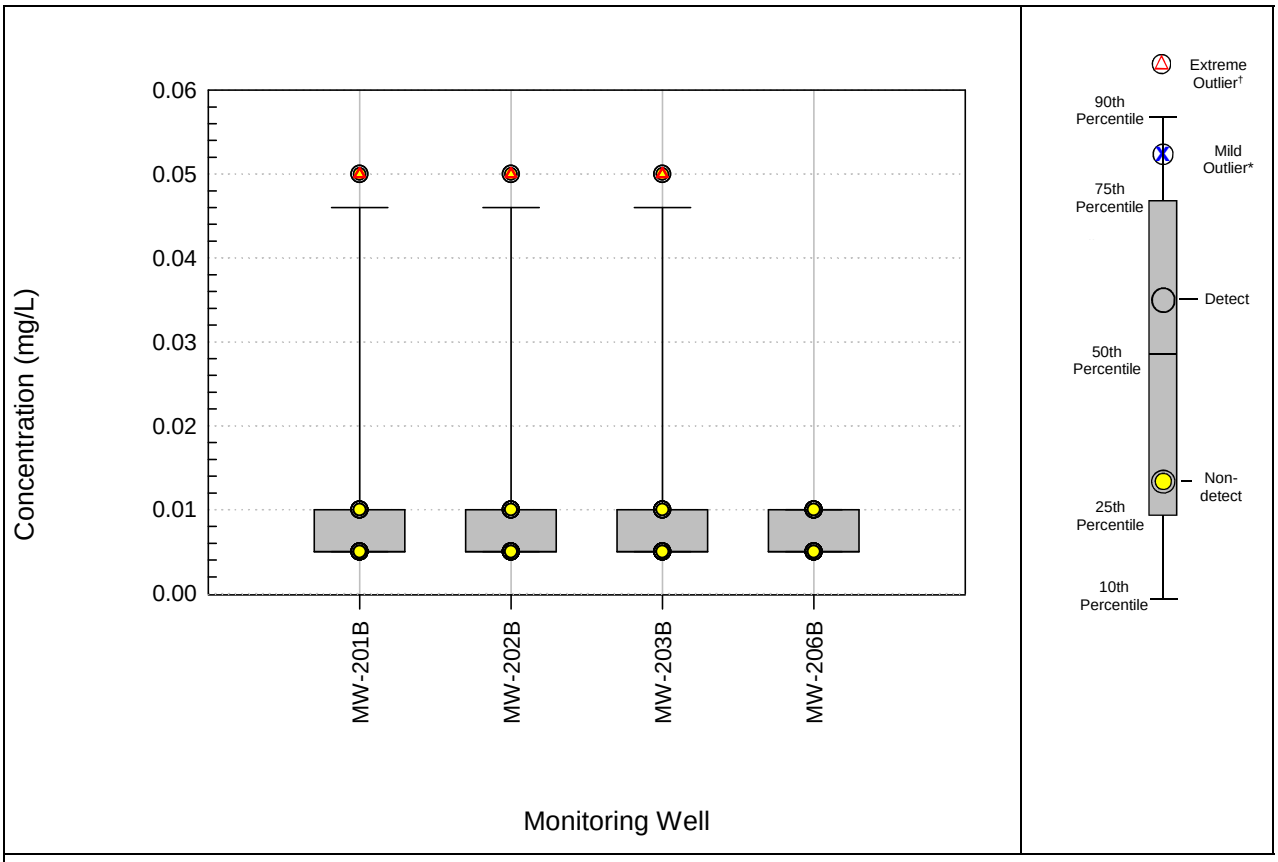
NA = value not applicable due to frequency of detection

ND = non-detect

IQR = interquartile range equals the 3rd quartile (75th percentile) - 1st quartile (25th percentile)

Reporting limit is used for non-detects unless otherwise noted.

Values less than 10 are reported to 2 significant figures. Values greater than 10 are reported to 3 significant figures.



ARCADIS

Box and Whisker Plot
Lead

Closed Hazardous Waste Surface Impoundment, Former Allison Gas Turbine Division - Plant 5
Indianapolis, Indiana

Figure C2-6

Monitoring Well	Units	Sample Size			ND Range		Detects					Percentiles (All Data)		
		NDs	Detects	Total	Min	Max	Min	Max	Mean	Median	SD	25th	50th	75th
MW-201B	mg/L	16	0	16	0.005	0.05	ND	ND	ND	ND	ND	0.005	0.005	0.01
MW-202B	mg/L	16	0	16	0.005	0.05	ND	ND	ND	ND	ND	0.005	0.005	0.01
MW-203B	mg/L	16	0	16	0.005	0.05	ND	ND	ND	ND	ND	0.005	0.005	0.01
MW-206B	mg/L	16	0	16	0.005	0.01	ND	ND	ND	ND	ND	0.005	0.005	0.01

Notes:

† Result value is < 25th percentile - 3*IQR or > 75th percentile + 3*IQR

* Result value is < 25th percentile - 1.5*IQR or > 75th percentile + 1.5*IQR

-- = no data

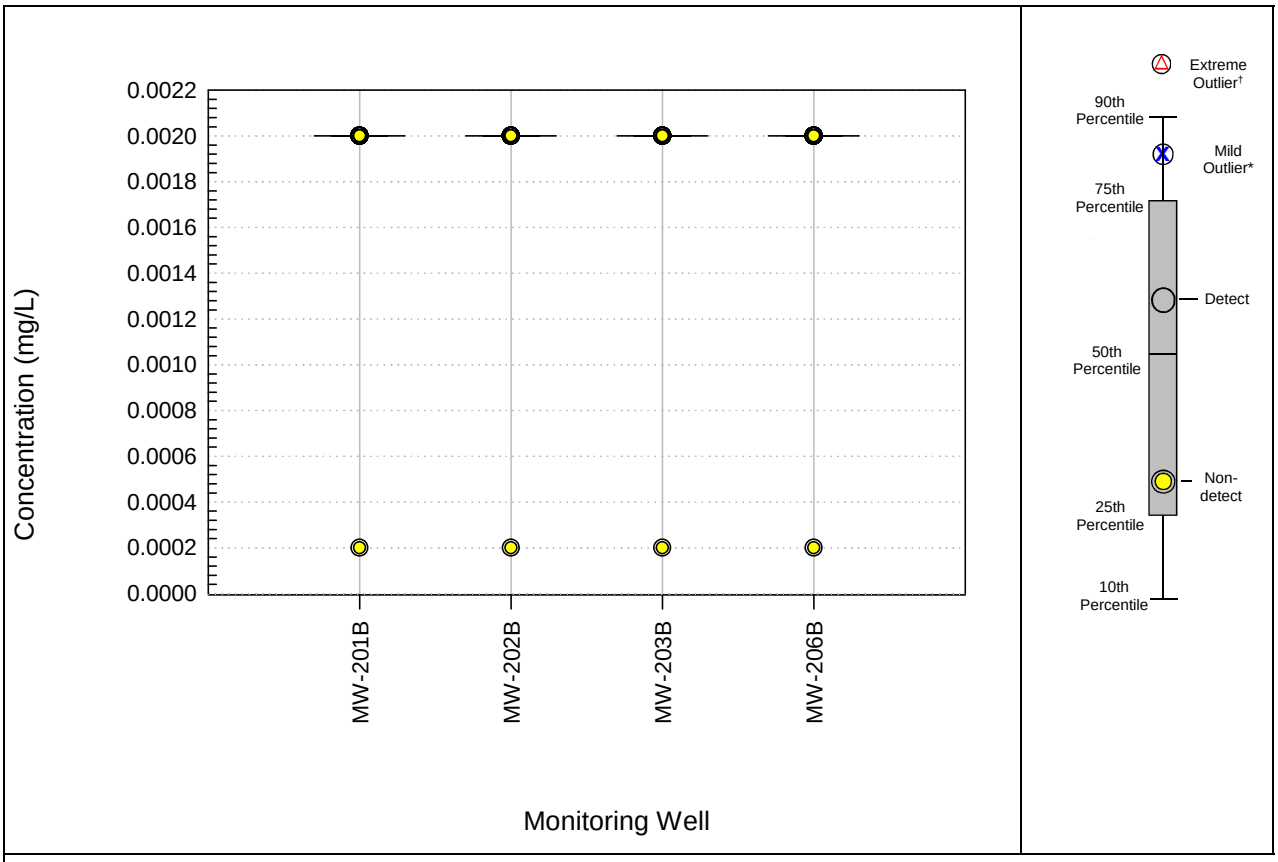
NA = value not applicable due to frequency of detection

ND = non-detect

IQR = interquartile range equals the 3rd quartile (75th percentile) - 1st quartile (25th percentile)

Reporting limit is used for non-detects unless otherwise noted.

Values less than 10 are reported to 2 significant figures. Values greater than 10 are reported to 3 significant figures.



ARCADIS

Box and Whisker Plot
Mercury

Closed Hazardous Waste Surface Impoundment, Former Allison Gas Turbine Division - Plant 5
Indianapolis, Indiana

Figure C2-7

Monitoring Well	Units	Sample Size			ND Range		Detects					Percentiles (All Data)		
		NDs	Detects	Total	Min	Max	Min	Max	Mean	Median	SD	25th	50th	75th
MW-201B	mg/L	16	0	16	0.0002	0.002	ND	ND	ND	ND	ND	0.002	0.002	0.002
MW-202B	mg/L	16	0	16	0.0002	0.002	ND	ND	ND	ND	ND	0.002	0.002	0.002
MW-203B	mg/L	16	0	16	0.0002	0.002	ND	ND	ND	ND	ND	0.002	0.002	0.002
MW-206B	mg/L	16	0	16	0.0002	0.002	ND	ND	ND	ND	ND	0.002	0.002	0.002

Notes:

† Result value is < 25th percentile - 3*IQR or > 75th percentile + 3*IQR

* Result value is < 25th percentile - 1.5*IQR or > 75th percentile + 1.5*IQR

-- = no data

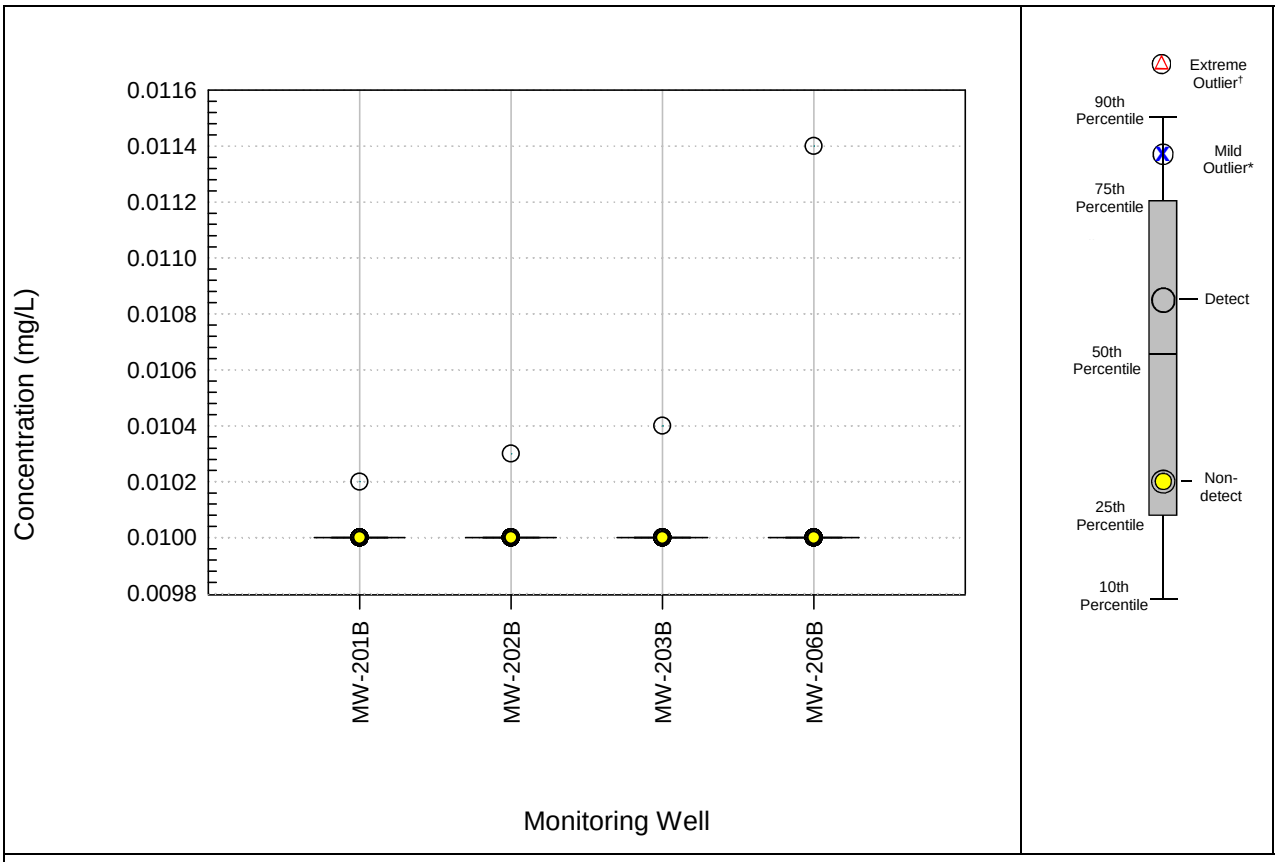
NA = value not applicable due to frequency of detection

ND = non-detect

IQR = interquartile range equals the 3rd quartile (75th percentile) - 1st quartile (25th percentile)

Reporting limit is used for non-detects unless otherwise noted.

Values less than 10 are reported to 2 significant figures. Values greater than 10 are reported to 3 significant figures.



ARCADIS

Box and Whisker Plot
Selenium

Closed Hazardous Waste Surface Impoundment, Former Allison Gas Turbine Division - Plant 5
Indianapolis, Indiana

Figure C2-8

Monitoring Well	Units	Sample Size			ND Range		Detects					Percentiles (All Data)		
		NDs	Detects	Total	Min	Max	Min	Max	Mean	Median	SD	25th	50th	75th
MW-201B	mg/L	15	1	16	0.01	0.01	0.01	0.01	0.01	0.01	ND	0.01	0.01	0.01
MW-202B	mg/L	15	1	16	0.01	0.01	0.01	0.01	0.01	0.01	ND	0.01	0.01	0.01
MW-203B	mg/L	15	1	16	0.01	0.01	0.01	0.01	0.01	0.01	ND	0.01	0.01	0.01
MW-206B	mg/L	15	1	16	0.01	0.01	0.01	0.01	0.01	0.01	ND	0.01	0.01	0.01

Notes:

† Result value is < 25th percentile - 3*IQR or > 75th percentile + 3*IQR

* Result value is < 25th percentile - 1.5*IQR or > 75th percentile + 1.5*IQR

-- = no data

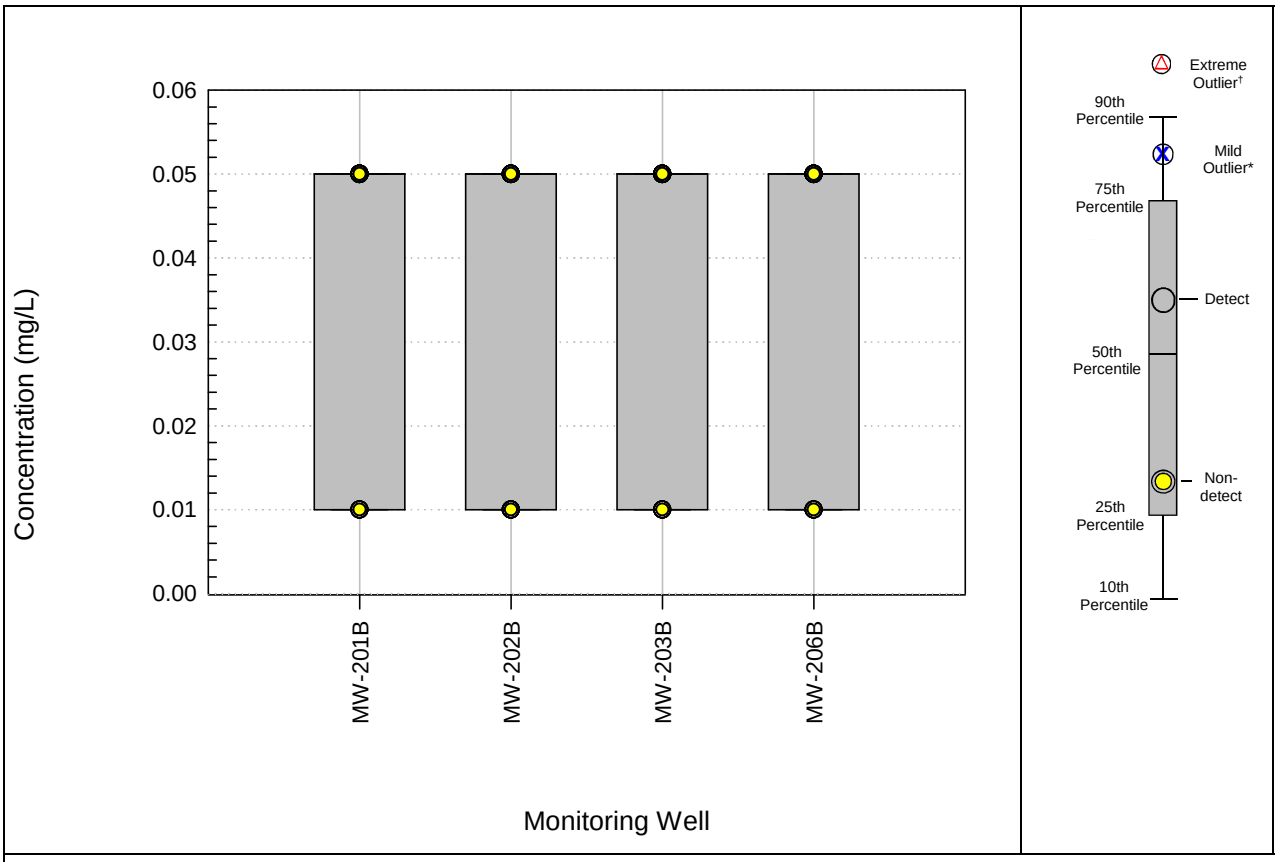
NA = value not applicable due to frequency of detection

ND = non-detect

IQR = interquartile range equals the 3rd quartile (75th percentile) - 1st quartile (25th percentile)

Reporting limit is used for non-detects unless otherwise noted.

Values less than 10 are reported to 2 significant figures. Values greater than 10 are reported to 3 significant figures.



ARCADIS

Box and Whisker Plot
Silver

Closed Hazardous Waste Surface Impoundment, Former Allison Gas Turbine Division - Plant 5
Indianapolis, Indiana

Figure C2-9

Monitoring Well	Units	Sample Size			ND Range		Detects					Percentiles (All Data)		
		NDs	Detects	Total	Min	Max	Min	Max	Mean	Median	SD	25th	50th	75th
MW-201B	mg/L	16	0	16	0.01	0.05	ND	ND	ND	ND	ND	0.01	0.05	0.05
MW-202B	mg/L	16	0	16	0.01	0.05	ND	ND	ND	ND	ND	0.01	0.05	0.05
MW-203B	mg/L	16	0	16	0.01	0.05	ND	ND	ND	ND	ND	0.01	0.05	0.05
MW-206B	mg/L	16	0	16	0.01	0.05	ND	ND	ND	ND	ND	0.01	0.05	0.05

Notes:

† Result value is < 25th percentile - 3*IQR or > 75th percentile + 3*IQR

* Result value is < 25th percentile - 1.5*IQR or > 75th percentile + 1.5*IQR

-- = no data

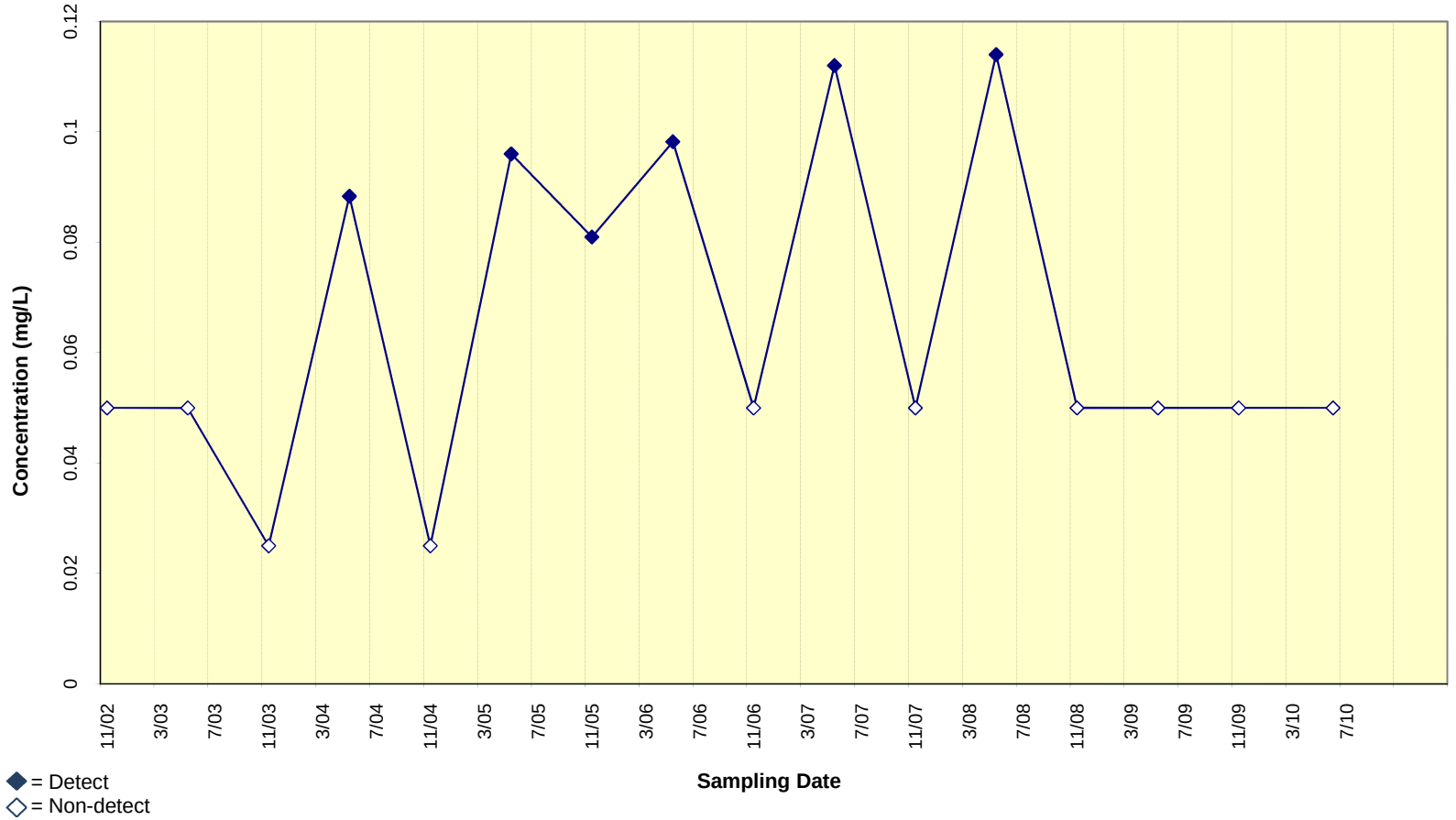
NA = value not applicable due to frequency of detection

ND = non-detect

IQR = interquartile range equals the 3rd quartile (75th percentile) - 1st quartile (25th percentile)

Reporting limit is used for non-detects unless otherwise noted.

Values less than 10 are reported to 2 significant figures. Values greater than 10 are reported to 3 significant figures.



Results of Mann-Kendall Test for Trend: **No Significant Trend**

p value = 0.329 Note: p value < 0.05 indicates a statistically significant trend (95% confidence level).

Results of Sen's Estimator of Slope: **No Significant Trend**

Median Slope Estimate = 0.0E+00 mg/L/day

95% Confidence Interval = -1.5E-05 to 1.7E-05 mg/L/day

mg/L - milligrams per liter

ARCADIS

Concentration vs. Time Plot – Barium in Monitoring Well 206B

Closed Hazardous Waste Surface Impoundment
Former Allison Gas Turbine Division - Plant 5
Indianapolis, Indiana

Figure C3