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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 – First Half 2011, Closed Hazardous Waste Surface Impoundment, GM Former AGT Division – INR000021436, 2701 West Raymond Street, Indianapolis, IN

Date:
September 2, 2011

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

Email:
heather.gastineau@arcadis-us.com

Our ref:
IN000297.2011.00100

Dear Commissioner:

On behalf of Revitalizing Auto Communities Environmental Response (RACER) Trust, 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 May 2011 and is being submitted within sixty (60) days of the final laboratory report which was received by ARCADIS on July 8, 2011. Signed Certifications by RACER and ARCADIS are attached as per the Permit. The following sections provide details of the groundwater monitoring.

Groundwater Monitoring

On May 31, 2011 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 Drawing 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 11 gallons of water were purged from the four monitoring wells during

the sampling event. After field measurements stabilized, groundwater samples were filtered through a 0.45 micron filter and collected in laboratory-supplied containers. The containers were immediately sealed, labeled and placed in an ice-packed cooler that were shipped to TestAmerica located in North Canton, Ohio, observing proper chain-of-custody procedures. The groundwater samples were analyzed for dissolved metals (arsenic, barium, cadmium, chromium, lead, mercury, silver, selenium) and total cyanide. The laboratory used for this event was TestAmerica Laboratories, Inc. (TestAmerica) in North Canton, Ohio, as requested by RACER Trust. TestAmerica was provided the estimated quantitation limits outlined in the Permit (Appendix H-Sampling and Analysis Plan). TestAmerica's reporting limits were lower that what was outlined in the Permit for all parameters except silver and arsenic (see below table).

Parameter	**Permit Estimated Quantitation Limits (EQLs) (mg/L)**	**TestAmerica Reporting Limits (mg/L)**
Cyanide	0.02	0.01
Mercury	0.002	0.0002
Silver	0.05	0.05
Arsenic	0.01	0.01
Barium	0.1	0.002
Cadmium	0.005	0.002
Chromium	0.01	0.005
Lead	0.01	0.003
Selenium	0.01	0.005

Groundwater analytical results for the monitoring wells are presented in Table 1. Groundwater field data sheets from the sampling event are provided in Attachment 1. The laboratory analytical results are provided in Attachment 2.

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 3. Background groundwater quality was established using the most

recent 16 valid observations (i.e., November 2003 to May 2011) for each indicator parameter, as summarized in Table 2.

The reporting limits provided by TestAmerica were lower than what was specified in the approved Permit for the site (see above table under section 'Groundwater Monitoring'). The statistical evaluation for this report was completed using TestAmerica's lower reporting limits. This has not had an impact on the results of the statistical evaluation; however, if this situation occurs in subsequent sampling events, it is recommended that the statistical evaluation utilize the reporting limits outlined in the Permit when the laboratory's reporting limits are lower than the EQL.

A point-by-point comparison of data from compliance wells to background screening levels (BSLs) was conducted to evaluate groundwater 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, with exception of barium, from all monitoring wells (MW-201B, 202B, 203B and 206B) were non-detect, and therefore below the Permit-specific quantitation limits for all indicator parameters. Barium was reported as an estimated concentration in all monitoring wells during this monitoring event: MW-201B (0.011 J mg/L), MW-202B (0.035 J mg/L), MW-203B (0.030 J mg/L) and MW-206B (0.090J mg/L). The results of the statistical evaluation, summarized in Attachment 3, suggest that there is no evidence of impacts to groundwater quality from the Surface Impoundment.

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 both the upper and the lower sand units (external) was completed to ensure an inward hydraulic gradient. Based on the review, the groundwater elevations in the external monitoring wells in the upper sand unit were generally 11 feet higher than

the groundwater elevations in the internal monitoring wells. The groundwater elevations in the external monitoring wells in the lower sand unit were more than 5.5 feet higher than the groundwater elevations in the internal monitoring wells. Therefore, an inward hydraulic gradient was observed during the first half of 2011. A graphical depiction of the elevations is presented on Drawing 2.

RACER Trust plans to complete the fall 2011 monitoring event in October 2011. If you have any questions or comments regarding the enclosed Groundwater Data Statistical Evaluation, please contact Mr. Robert Hare at 419.277.0815 or either of the undersigned.

Sincerely,

ARCADIS U.S., Inc.

H. Gastineau-Lyons

Heather Gastineau-Lyons, L.P.G.
Staff Geologist

Sarah Fisher

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

Copies:
Robert Hare, RACER Trust

Attachments:
Drawing 1 – Site Map
Drawing 2 – Surface Impoundment May 31, 2011 Groundwater Elevations
Table 1 – Groundwater Analytical Data
Table 2 – Upgradient Monitoring Well MW-206B Background Data
Table 3 – Background Screening Levels
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

On behalf of RACER TRUST

Robert W. Hare, P.E., CHMM
RACER Trust
Cleanup Manager (IL, IN, KS, MO, NJ, WI)

8-29-2011
Date

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)	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)	11/23/09	<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
	MW-201B (10202010)	10/20/10	0.0063	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	MW-201B (053111)	05/31/11	<0.0100	0.011 J	<0.0020	<0.0050	<0.0030	<0.00020	<0.0050	<0.0500	<0.010

Concentrations are in mg/L

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)	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
	MW-202B (10202010)	10/20/10	<0.0050	0.110	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	MW-202B (053111)	05/31/11	<0.0100	0.035 J	<0.0020	<0.0050	<0.0030	<0.00020	<0.0050	<0.0500	<0.010

Concentrations are in mg/L

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)	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
	MW-203B (10202010)	10/20/10	<0.0050	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	MW-203B (10202010) FD	10/20/10	<0.0050	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	MW-203B (053111)	05/31/11	<0.0100	0.030 J	<0.0020	<0.0050	<0.0030	<0.00020	<0.0050	<0.0500	<0.010
	MW-203B (053111) FD	05/31/11	<0.0100	0.032 J	<0.0020	<0.0050	<0.0030	<0.00020	<0.0050	<0.0500	<0.010

Concentrations are in mg/L

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)	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)	11/23/09	<0.0050	<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
	MW-206B (10202010)	10/20/10	<0.0050	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	MW-206B (053111)	05/31/11	<0.0100	0.090 J	<0.0020	<0.0050	<0.0030	<0.00020	<0.0050	<0.0050	<0.010

Notes: * Re-evaluation of Reporting limits provided by Pace Analytical Services, Inc. (letter dated April 28, 2006)
Table includes results for most recent 16 valid sample observations.

Concentrations are in mg/L

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	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	0.0883	<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	0.0162	0.096	<0.0010	<0.0100*	<0.0050	<0.0020	<0.0100	<0.0100	<0.0200
	11/10/2005	<0.0100	0.0810	<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
	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
	10/20/2010	<0.0050	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	5/31/2011	<0.0100	0.090 J	<0.0020	<0.0050	<0.0030	<0.0002	<0.0050	<0.0050	<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)

Concentrations are in mg/L

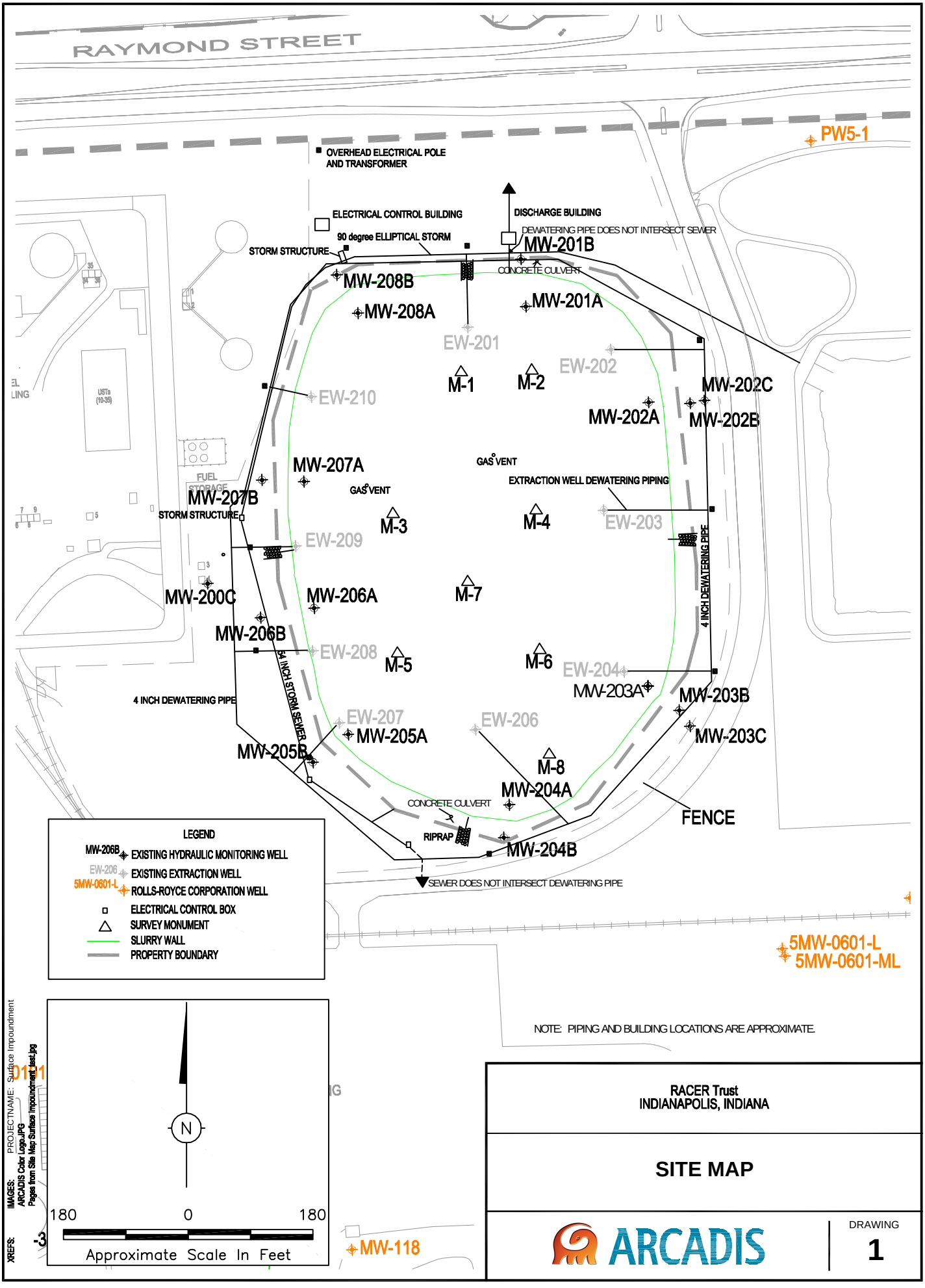
TABLE 3

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	2011 Sampling Dates	> BSL ?
Arsenic	1 / 16	0.016	NA	NA	0.02	< 0.01	All 3 wells	5/31/11	No
Barium	7 / 16	0.114	0.127	Kaplan-Meier [2]	0.13	0.035	MW-202B	5/31/11	No
Cadmium	0 / 16	< 0.005	NA	NA	0.01	< 0.002	All 3 wells	5/31/11	No
Chromium	3 / 16	0.076	NA	NA	0.08	< 0.005	All 3 wells	5/31/11	No
Lead	0 / 16	< 0.01	NA	NA	0.01	< 0.003	All 3 wells	5/31/11	No
Mercury	0 / 16	< 0.002	NA	NA	0.00	< 0.0002	All 3 wells	5/31/11	No
Selenium	1 / 16	0.0114	NA	NA	0.01	< 0.005	All 3 wells	5/31/11	No
Silver	0 / 16	< 0.05	NA	NA	0.05	< 0.05	All 3 wells	5/31/11	No
Cyanide	0 / 16	< 0.02	NA	NA	0.02	< 0.01	All 3 wells	5/31/11	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. BSL calculated with the most recent 16 samples only.
[2] Data are left censored with n=16 and detects = 7, 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.



CITY:Indianapolis DIV/GROUP:SER DB:HGL PM:J.Cosgrove TM:(Opt)
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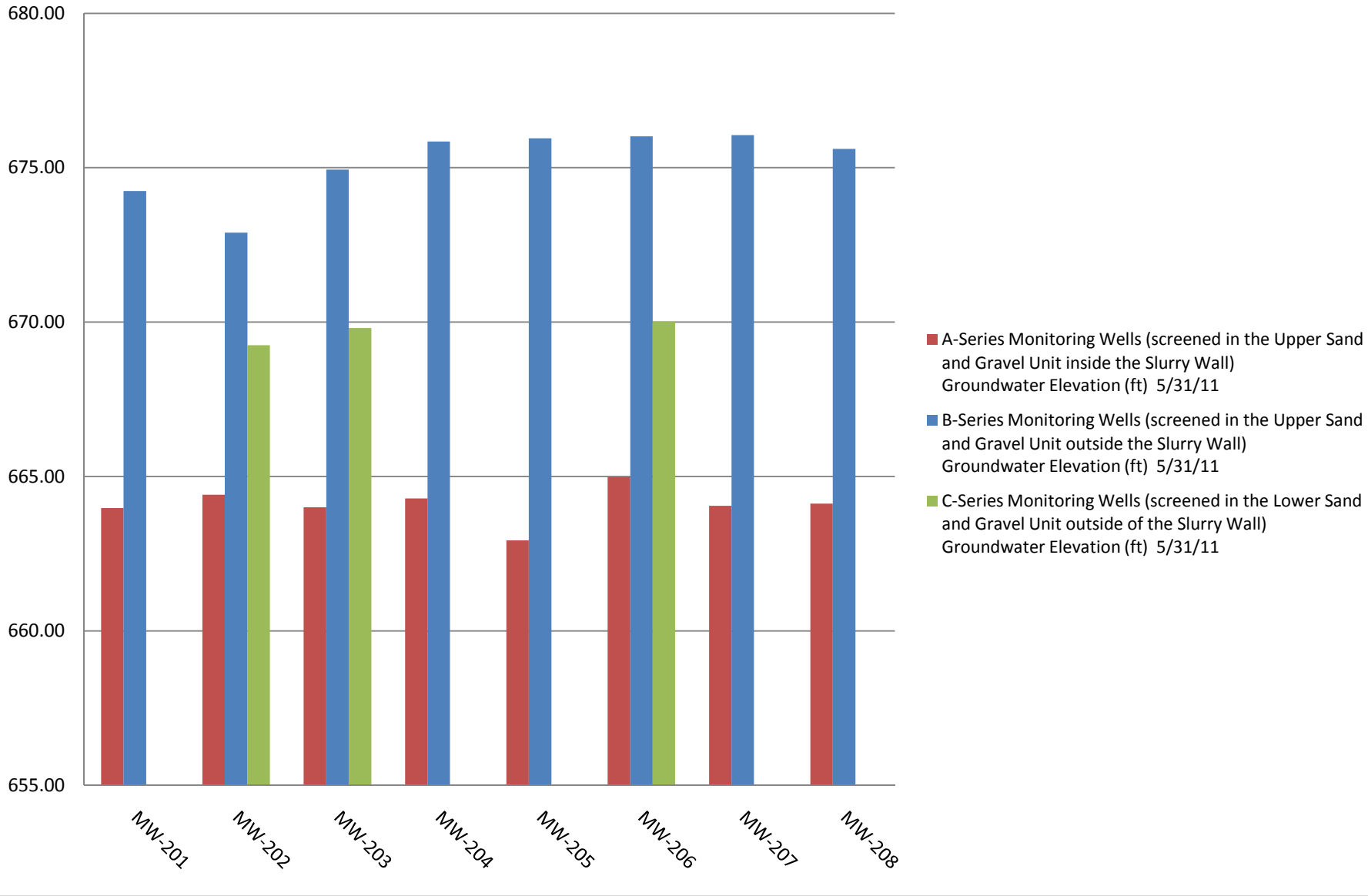
XREFS: -3

IMAGES: ARCADIS Color Logo.JPG
Pages from Site Map Surface Impoundment Test.jpg

PROJECTNAME: Surface Impoundment

01111

Drawing 2. Surface Impoundment
May 31, 2011 Groundwater Elevations



ARCADIS

Attachment 1

Groundwater Sampling Field Sheets

MW-20IB

WELL PURGING FIELD INFORMATION FORM

JOB# 1N297-2011

SITE/PROJECT NAME: Racer Trust - AGT SI

WELL# MW-20IB

WELL PURGING INFORMATION

PURGE DATE (MM DD YY)	SAMPLE DATE (MM DD YY)	WATER VOL. IN CASING (LITRES/GALLONS)	ACTUAL VOLUME PURGED (LITRES/GALLONS)
5/31/11	5/31/11	3015	2614

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 (C) BLADDER PUMP D - GAS LIFT PUMP E - PURGE PUMP F - DIPPER BOTTLE G - BAILER H - WATERRA®

SAMPLING DEVICE [ ] X- PURGING OTHER (SPECIFY) X- SAMPLING OTHER (SPECIFY)

PURGING DEVICE [ ] A - TEFLON B - STAINLESS STEEL C - POLYPROPYLENE D - PVC (E) POLYETHYLENE

SAMPLING DEVICE [ ] X- PURGING OTHER (SPECIFY) X- SAMPLING OTHER (SPECIFY)

PURGING DEVICE [ ] A - TEFLON B - TYGON C - ROPE D - POLYPROPYLENE (E) POLYETHYLENE F - SILICONE G - COMBINATION TEFLON/POLYPROPYLENE X- (SPECIFY)

SAMPLING DEVICE [ ] X- PURGING OTHER (SPECIFY) X- SAMPLING OTHER (SPECIFY)

FILTERING DEVICES 0.45 [ ] (A) IN-LINE DISPOSABLE B - PRESSURE C - VACUUM

FIELD MEASUREMENTS

WELL ELEVATION	693016 (m/ft)	GROUNDWATER ELEVATION	671414 (m/ft)
DEPTH TO WATER	1882 (m/ft)	WELL DEPTH	3762 (m/ft)

pH	TURBIDITY	CONDUCTIVITY	ORP	DO	SAMPLE TEMPERATURE
8.1 (std)	20 (ntu)	0.6816 (µm/cm) AT 25°C	124 (mV)	4.37 (mg/L)	23.1 (°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: N/A COLOR: clear TURBIDITY: clear

WEATHER CONDITIONS: WIND SPEED DIRECTION PRECIPITATION Y/N OUTLOOK

SPECIFIC COMMENTS Sampled @ 1545

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

5/31/11 DATE — Tim Porter PRINT — SIGNATURE

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: Racer Trust - AGT SI
Ref. No.: IN000297.2011

Date: 5/31/11
Personnel: TP

Monitoring Well Data:

Well No.: MW-201B
Measurement Point: TOC - 693.06
Constructed Well Depth (ft): 38.51
Measured Well Depth (ft): 37.62
Depth of Sediment (ft): 0.89

Sampled @ 1545 5/31/11

Screen Length (ft): 10
Depth to Pump Intake (ft)[1]: 33'
Well Diameter, D (in): 2in.
Well Screen Volume, V_s (mL)[2]: 1.63 gal
Initial Depth to Water (ft): 18.82

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]
1514	400	18.89	0.07	8.08	29.38	0.6506	114	4.98	33.29	0.53	0.32
1519	400	18.89	0.07	8.14	28.90	0.6646	117	4.64	-3.954 ★	0.53	0.32
1524	400	18.89	0.07	8.14	22.62	0.6665	120	4.46	-16.4	0.53	0.32
1529	400	18.89	0.07	8.13	22.63	0.6702	122	4.41	-20.39	0.53	0.32
1534	400	18.89	0.07	8.13	23.06	0.6719	123	4.38	-19.89	0.53	0.32
1539	400	18.89	0.07	8.12	23.13	0.6807	124	4.37	-20.70	0.53	0.32

★ Turbidity will be re-calibrated prior to purging next well per discussion w/ Office.

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# 1N2971.2V11

SITE/PROJECT NAME: RACER TRUST - AGT 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)
5/31/11	5/31/11	2.9	3.7

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®	X- PURGING OTHER (SPECIFY)
SAMPLING DEVICE	[C]	C - BLADDER PUMP	F - DIPPER BOTTLE		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] (A) - IN-LINE DISPOSABLE B - PRESSURE C - VACUUM

FIELD MEASUREMENTS

WELL ELEVATION (TOC)	691.43 (m/ft)		GROUNDWATER ELEVATION	671.01 (m/ft)	
DEPTH TO WATER	19.61 (m/ft)		WELL DEPTH	31.45 (m/ft)	

pH	TURBIDITY	CONDUCTIVITY	ORP	DO	SAMPLE TEMPERATURE
8.0 (std)	1 (ntu)	0.371 (µm/cm) AT 25°C	102 (mV)	7.98 (mg/L)	18.97 (°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: clear 1.596 NTU

WEATHER CONDITIONS: WIND SPEED _____ DIRECTION _____ PRECIPITATION Y/N OUTLOOK _____

SPECIFIC COMMENTS

Sampled @ 1430

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

DATE	PRINT	SIGNATURE
5/31/11	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: Fixer Trust - AGT Surface Impoundment
Ref. No.: IN 000299.2011

Date: 5/31/11
Personnel: TB

Sampled @ 1430 5/31/11

Monitoring Well Data:

Well No.: MW-202B
Measurement Point: TOC - 691.43
Constructed Well Depth (ft): 37.71 ft
Measured Well Depth (ft): 37.45 ft
Depth of Sediment (ft): 0.26 ft

Screen Length (ft): 10ft
Depth to Pump Intake (ft)[1]: 32 ft
Well Diameter, D (in): 2 in
Well Screen Volume, V_s (mL)[2]: 1,631 gal
Initial Depth to Water (ft): 19.61 ft

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]
1352	400	19.61	0.00	8.03	20.74	0.3834	95	8.37	72.33	0.53	0.32
1357	400	19.61	0.00	8.04	19.73	0.3722	109	8.29	51.91	0.53	0.32
1402	400	19.61	0.00	8.05	20.75	0.3803	106	8.17	50.95	0.53	0.32
1407	400	19.61	0.00	8.04	20.70	0.3789	104	8.21	20.92	0.53	0.32
1412	400	19.61	0.00	8.03	19.63	0.3738	102	8.14	15.95	0.53	0.32
1417	400	19.61	0.00	8.03	19.10	0.3610	101	8.16	8.89	0.53	0.32
1423	400	19.61	0.00	8.03	19.05	0.3692	104	8.05	7.64	0.53	0.32
1427	400	19.61	0.00	8.02	18.97	0.3711	102	7.98	1.596	0.53	0.32

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

WELL PURGING FIELD INFORMATION FORM

JOB# 1N2971-2011

SITE/PROJECT NAME: RACER TRUST- AGT SI

WELL# MW203B

WELL PURGING INFORMATION

PURGE DATE (MM DD YY)	SAMPLE DATE (MM DD YY)	WATER VOL. IN CASING (LITRES/GALLONS)	ACTUAL VOLUME PURGED (LITRES/GALLONS)
5/31/11	5/31/11	2.83	15.15

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] 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] A - IN-LINE DISPOSABLE; B - PRESSURE; C - VACUUM

FIELD MEASUREMENTS

WELL ELEVATION	691.65 (m/ft)	GROUNDWATER ELEVATION	674.92 (m/ft)
DEPTH TO WATER	16.73 (m/ft)	WELL DEPTH	34.10 (m/ft)

pH	TURBIDITY	CONDUCTIVITY	ORP	DO	SAMPLE TEMPERATURE
7.2 (std)	1.8 (ntu)	0.610 AT 25°C (µm/cm)	174 (mV)	5.32 (mg/L)	19.36 (°C)
( ) (std)	( ) (ntu)	( ) AT 25°C (µm/cm)	( ) (mV)	( ) (mg/L)	( ) (°C)
( ) (std)	( ) (ntu)	( ) AT 25°C (µm/cm)	( ) (mV)	( ) (mg/L)	( ) (°C)
( ) (std)	( ) (ntu)	( ) AT 25°C (µm/cm)	( ) (mV)	( ) (mg/L)	( ) (°C)
( ) (std)	( ) (ntu)	( ) AT 25°C (µm/cm)	( ) (mV)	( ) (mg/L)	( ) (°C)

FIELD COMMENTS

SAMPLE APPEARANCE: clear ODOR: NA COLOR: clear TURBIDITY: clear

WEATHER CONDITIONS: WIND SPEED _____ DIRECTION _____ PRECIPITATION Y/N OUTLOOK _____

SPECIFIC COMMENTS

Sampled @ 1300

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

5/31/11 DATE — T.M Porter PRINT — SIGNATURE

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

17300 (2) PART C FMG-08-4-01
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: Racer Trust - AGT SI
Ref. No.: IN000297.2011

Date: 5/31/11
Personnel: [illegible]

Monitoring Well Data:

Well No.: MW-7053B
Measurement Point: TOC - 691.65 ft,
Constructed Well Depth (ft): 34.30
Measured Well Depth (ft): 34.10
Depth of Sediment (ft): 0.20 ft

Screen Length (ft): 10 ft
Depth to Pump Intake (ft)[3]: 29 ft
Well Diameter, D (in): 2 in
Well Screen Volume, V_s (mL)[2]: 1.63 gal
Initial Depth to Water (ft): 16.73 ft

Pump @ ~29.00'

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]
1152	300	16.73	0.00	7.22	16.70	0.5357	223	7.44	2.52	0.40	0.24
1157	300	16.73	0.00	7.26	17.07	0.5548	221	6.76	-13.73 ★	0.40	0.24
1202	300	16.73	0.00	7.26	17.28	0.5455	217	6.27	-28.51	0.40	0.24
					Re-Calibrate						
1208	300	16.73	0.00	7.25	17.44	0.5496	211	5.70	21.20	0.40	0.24
1213	300	16.73	0.00	7.26	17.62	0.5961	205	5.41	22.04	0.40	0.24
1218	300	16.73	0.00	7.25	18.01	0.5997	200	5.33	15.49	0.40	0.24
1223	300	16.73	0.00	7.26	18.26	0.6018	195	5.28	16.54	0.40	0.24
1228	300	16.73	0.00	7.26	18.41	0.6017	191	5.27	14.92	0.40	0.24
1233	300	16.73	0.00	7.26	18.66	0.6034	188	5.27	14.48	0.40	0.24
1238	300	16.73	0.00	7.26	18.80	0.6014	185	5.23	15.37	0.40	0.24
1243	300	16.73	0.00	7.26	18.87	0.6036	182	5.35	15.15	0.40	0.24
1248	300	16.73	0.00	7.26	18.90	0.6018	179	5.31	17.07	0.40	0.24
1253	300	16.73	0.00	7.26	19.04	0.6016	176 ★	5.33	16.84		

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, $V_s = p*(D/2)^2*(5*12)*(2.54)^3$ ★ Talk to Aftheed (Equipment Rental) & recalibrate for Turbidity ★

(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: Racer Trust - AGT SI
Ref. No.: 1N000297.2011

Date: 5/31/11
Personnel: TP

Sampled @ 1300 5/31/11

Monitoring Well Data:

Well No.: MW-203B (continued)
Measurement Point: 691.65 ft
Constructed Well Depth (ft): 34.30 ft
Measured Well Depth (ft): 34.10 ft
Depth of Sediment (ft): 0.20 ft

Screen Length (ft): 10 ft
Depth to Pump Intake (ft)[1]: 29 ft
Well Diameter, D (in): 2 in.
Well Screen Volume, V_s (mL)[2]: 1.63 gal
Initial Depth to Water (ft): 16.73

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]
1258	300	16.73	0.00	7.26	19.36	0.6642	174	5.32	18.78	0.40	0.24

& Turbidity stabilizing above 5 NTU. Sample taken per instructions

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-206B

WELL PURGING FIELD INFORMATION FORM

JOB# 1N2971-2011

SITE/PROJECT NAME: Racer Trust - AGT-SI

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)
5/31/11	5/31/11	3.27	2.64

PURGING AND SAMPLING EQUIPMENT

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

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

PURGING DEVICE	C	A - SUBMERSIBLE PUMP	D - GAS LIFT PUMP	G - BAILER	X- PURGING OTHER (SPECIFY)
		B - PERISTALTIC PUMP	E - PURGE PUMP	H - WATERRA®	
SAMPLING DEVICE	C	(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	(A) IN-LINE DISPOSABLE	B - PRESSURE	C - VACUUM	

FIELD MEASUREMENTS

WELL ELEVATION	693.46 (m/ft)	GROUNDWATER ELEVATION	676.03 (m/ft)
DEPTH TO WATER	17.43 (m/ft)	WELL DEPTH	37.49 (m/ft)

pH	TURBIDITY	CONDUCTIVITY	ORP	DO	SAMPLE TEMPERATURE
7.1 (std)	2.2 (ntu)	0.964 (µm/cm) AT 25°C	86 (mV)	0.15 (mg/L)	18.4 (°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: N/A COLOR: clear TURBIDITY: clear

WEATHER CONDITIONS: WIND SPEED _____ DIRECTION _____ PRECIPITATION Y/N OUTLOOK _____

SPECIFIC COMMENTS

Sampled @ 1700

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

DATE	PRINT	SIGNATURE
5/31/11	Tim Porter	

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: ~~Rolls Royce~~ Racer Trust - AGT SI
Ref. No.: IN000297.2011

Date: 5/31/11
Personnel: TP

Monitoring Well Data:

Well No.: MW-206B ☆MS/MSD
Measurement Point: TOC- 693.46
Constructed Well Depth (ft): 37.73
Measured Well Depth (ft): 37.54
Depth of Sediment (ft): 0.19

Sample 1700 5/31/11

Screen Length (ft): 10' ft
Depth to Pump Intake (ft)[1]: 32 ft
Well Diameter, D (in): 2 in
Well Screen Volume, V_s (mL)[2]: 1.63 gal
Initial Depth to Water (ft): 17.43 ft

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]
1629	400	17.43	0.00	7.20	19.22	0.9775	95	0.60	5.426	0.53	0.32
1634	400	17.43	0.00	7.20	18.72	0.9664	87	0.30	-9.195	0.53	0.32
1639	400	17.43	0.00	7.18	18.64	0.9687	85	0.23	-14.76	0.53	0.32
1644	400	17.43	0.00	7.18	18.51	0.9634	84	0.19	-10.65	0.53	0.32
1649	400	17.43	0.00	7.17	18.56	0.9631	85	0.17	-21.04	0.53	0.32
1654	400	17.43	0.00	7.17	18.48	0.9646	82	0.15	-22.65	0.53	0.32

Notes:

☆ Re-calibrated turbidity prior to sampling this well; still having issues. Will sample after remaining parameters stabilize for discussion w/ office

(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.

5/31/11

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

Resubmitted August 2006

ARCADIS

Attachment 2

Laboratory Analytical Report

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

Job Number: 240-759-1

Job Description: Former AGT Surface Impoundment-IN000297.

For:
ARCADIS U.S., Inc.
251 East Ohio Street
Suite 800
Indianapolis, IN 46204

Attention: Sarah Fisher

Approved for release.
Denise Pohl
Project Manager II
7/7/2011 11:13 AM

Denise Pohl
Project Manager II
denise.pohl@testamericainc.com
07/07/2011

cc: Thomas Kolb

TestAmerica Laboratories, Inc.
TestAmerica North Canton 4101 Shuffel Street NW, North Canton, OH 44720
Tel (330) 497-9396 Fax (330) 497-0772 www.testamericainc.com

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CASE NARRATIVE

Client: ARCADIS U.S., Inc.

Project: Former AGT Surface Impoundment - IN000297.0020

Report Number: 240-759-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica North Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 06/01/2011; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.2 C.

DISSOLVED METALS (ICP)

Samples MW-203B(053111) (240-759-1), FD-1(053111)-TP (240-759-2), MW-202B(053111) (240-759-3), MW-201B(053111) (240-759-4), EB-1(053111)-TP (240-759-5) and MW-206B(053111) (240-759-6) were analyzed for dissolved metals (ICP) in accordance with EPA SW-846 Method 6010B. The samples were prepared on 06/21/2011 and analyzed on 06/27/2011.

No difficulties were encountered during the metals analyses.

All quality control parameters were within the acceptance limits.

Method(s) 6010B: The ccb was greater than or equal to the requested reporting limit for ag(silver) and cr(chromium). Since the sample results was/were below the reporting limit, the results(s) was/were accepted.

No other analytical or quality issues were noted.

DISSOLVED MERCURY (CVAA)

Samples MW-203B(053111) (240-759-1), FD-1(053111)-TP (240-759-2), MW-202B(053111) (240-759-3), MW-201B(053111) (240-759-4), EB-1(053111)-TP (240-759-5) and MW-206B(053111) (240-759-6) were analyzed for dissolved mercury (CVAA) in accordance with EPA SW-846 Methods 7470A. The samples were prepared on 06/20/2011 and analyzed on 06/22/2011.

No difficulties were encountered during the mercury analyses.

All quality control parameters were within the acceptance limits.

TOTAL CYANIDE

Samples MW-203B(053111) (240-759-1), FD-1(053111)-TP (240-759-2), MW-202B(053111) (240-759-3), MW-201B(053111)

(240-759-4), EB-1(053111)-TP (240-759-5) and MW-206B(053111) (240-759-6) were analyzed for total cyanide in accordance with EPA SW-846 Method 9012A. The samples were prepared and analyzed on 06/09/2011 and 06/10/2011.

No difficulties were encountered during the cyanide analyses.

All quality control parameters were within the acceptance limits.

SAMPLE SUMMARY

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
240-759-1	MW-203B(053111)	Water	05/31/2011 1300	06/01/2011 0950
240-759-2FD	FD-1(053111)-TP	Water	05/31/2011 0000	06/01/2011 0950
240-759-3	MW-202B(053111)	Water	05/31/2011 1430	06/01/2011 0950
240-759-4	MW-201B(053111)	Water	05/31/2011 1545	06/01/2011 0950
240-759-5	EB-1(053111)-TP	Water	05/31/2011 1600	06/01/2011 0950
240-759-6	MW-206B(053111)	Water	05/31/2011 1700	06/01/2011 0950
240-759-6MS	MW-206B(053111)	Water	05/31/2011 1700	06/01/2011 0950
240-759-6MSD	MW-206B(053111)	Water	05/31/2011 1700	06/01/2011 0950

EXECUTIVE SUMMARY - Detections

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Lab Sample ID / Analyte	Client Sample ID	Result / Qualifier		Reporting Limit	Units	Method
240-759-1	**MW-203B(053111)**					
Dissolved						
Barium		30	J	100	ug/L	6010B
240-759-2FD	**FD-1(053111)-TP**					
Dissolved						
Barium		32	J	100	ug/L	6010B
240-759-3	**MW-202B(053111)**					
Dissolved						
Barium		35	J	100	ug/L	6010B
Chromium		2.6	J ^	5.0	ug/L	6010B
240-759-4	**MW-201B(053111)**					
Dissolved						
Arsenic		4.5	J	10	ug/L	6010B
Barium		11	J	100	ug/L	6010B
240-759-6	**MW-206B(053111)**					
Dissolved						
Barium		90	J	100	ug/L	6010B

METHOD SUMMARY

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Description	Lab Location	Method	Preparation Method
Matrix Water			
Metals (ICP)	TAL NC	SW846 6010B	
Preparation, Total Recoverable or Dissolved Metals	TAL NC		SW846 3005A
Sample Filtration, Field			FIELD_FLTRD
Mercury (CVAA)	TAL NC	SW846 7470A	
Preparation, Mercury	TAL NC		SW846 7470A
Sample Filtration, Field			FIELD_FLTRD
Cyanide, Total and/or Amenable	TAL NC	SW846 9012A	
Cyanide, Total and/or Amenable, Distillation	TAL NC		SW846 9012A

Lab References:

TAL NC = TestAmerica North Canton

Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

METHOD / ANALYST SUMMARY

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Method	Analyst	Analyst ID
SW846 6010B	Davies, Brian	BD
SW846 7470A	Toth, Roger	RT
SW846 9012A	Henry, Kyle	KH
SW846 9012A	Rohr, Ben	BR

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Client Sample ID: **MW-203B(053111)**

Lab Sample ID: 240-759-1 Date Sampled: 05/31/2011 1300
Client Matrix: Water Date Received: 06/01/2011 0950

6010B Metals (ICP)-Dissolved

Analysis Method:	6010B	Analysis Batch:	240-6343	Instrument ID:	I5
Prep Method:	3005A	Prep Batch:	240-5513	Lab File ID:	I50627A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2011 1207			Final Weight/Volume:	50 mL
Prep Date:	06/21/2011 1230				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	5.0	U	2.2	5.0
Arsenic	10	U	3.2	10
Barium	30	J	0.67	100
Cadmium	2.0	U	0.66	2.0
Chromium	5.0	U	2.2	5.0
Lead	3.0	U	1.9	3.0
Selenium	5.0	U	4.1	5.0

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-5897	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-5359	Lab File ID:	HG10622A.PRN
Dilution:	1.0			Initial Weight/Volume:	100 mL
Analysis Date:	06/22/2011 1752			Final Weight/Volume:	100 mL
Prep Date:	06/20/2011 1405				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Client Sample ID: **FD-1(053111)-TP**

Lab Sample ID: 240-759-2FD Date Sampled: 05/31/2011 0000
Client Matrix: Water Date Received: 06/01/2011 0950

6010B Metals (ICP)-Dissolved

Analysis Method:	6010B	Analysis Batch:	240-6343	Instrument ID:	I5
Prep Method:	3005A	Prep Batch:	240-5513	Lab File ID:	I50627A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2011 1213			Final Weight/Volume:	50 mL
Prep Date:	06/21/2011 1230				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	5.0	U	2.2	5.0
Arsenic	10	U	3.2	10
Barium	32	J	0.67	100
Cadmium	2.0	U	0.66	2.0
Chromium	5.0	U	2.2	5.0
Lead	3.0	U	1.9	3.0
Selenium	5.0	U	4.1	5.0

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-5897	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-5359	Lab File ID:	HG10622A.PRN
Dilution:	1.0			Initial Weight/Volume:	100 mL
Analysis Date:	06/22/2011 1753			Final Weight/Volume:	100 mL
Prep Date:	06/20/2011 1405				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Client Sample ID: **MW-202B(053111)**

Lab Sample ID: 240-759-3 Date Sampled: 05/31/2011 1430
Client Matrix: Water Date Received: 06/01/2011 0950

6010B Metals (ICP)-Dissolved

Analysis Method:	6010B	Analysis Batch:	240-6343	Instrument ID:	I5
Prep Method:	3005A	Prep Batch:	240-5513	Lab File ID:	I50627A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2011 1230			Final Weight/Volume:	50 mL
Prep Date:	06/21/2011 1230				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	5.0	U	2.2	5.0
Arsenic	10	U	3.2	10
Barium	35	J	0.67	100
Cadmium	2.0	U	0.66	2.0
Chromium	2.6	J ^	2.2	5.0
Lead	3.0	U	1.9	3.0
Selenium	5.0	U	4.1	5.0

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-5897	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-5359	Lab File ID:	HG10622A.PRN
Dilution:	1.0			Initial Weight/Volume:	100 mL
Analysis Date:	06/22/2011 1755			Final Weight/Volume:	100 mL
Prep Date:	06/20/2011 1405				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Client Sample ID: **MW-201B(053111)**

Lab Sample ID: 240-759-4 Date Sampled: 05/31/2011 1545
Client Matrix: Water Date Received: 06/01/2011 0950

6010B Metals (ICP)-Dissolved

Analysis Method:	6010B	Analysis Batch:	240-6343	Instrument ID:	I5
Prep Method:	3005A	Prep Batch:	240-5513	Lab File ID:	I50627A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2011 1235			Final Weight/Volume:	50 mL
Prep Date:	06/21/2011 1230				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	5.0	U	2.2	5.0
Arsenic	4.5	J	3.2	10
Barium	11	J	0.67	100
Cadmium	2.0	U	0.66	2.0
Chromium	5.0	U	2.2	5.0
Lead	3.0	U	1.9	3.0
Selenium	5.0	U	4.1	5.0

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-5897	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-5359	Lab File ID:	HG10622A.PRN
Dilution:	1.0			Initial Weight/Volume:	100 mL
Analysis Date:	06/22/2011 1756			Final Weight/Volume:	100 mL
Prep Date:	06/20/2011 1405				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Client Sample ID: **EB-1(053111)-TP**

Lab Sample ID: 240-759-5 Date Sampled: 05/31/2011 1600
Client Matrix: Water Date Received: 06/01/2011 0950

6010B Metals (ICP)-Dissolved

Analysis Method:	6010B	Analysis Batch:	240-6343	Instrument ID:	I5
Prep Method:	3005A	Prep Batch:	240-5513	Lab File ID:	I50627A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2011 1241			Final Weight/Volume:	50 mL
Prep Date:	06/21/2011 1230				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	5.0	U	2.2	5.0
Arsenic	10	U	3.2	10
Barium	100	U	0.67	100
Cadmium	2.0	U	0.66	2.0
Chromium	5.0	U	2.2	5.0
Lead	3.0	U	1.9	3.0
Selenium	5.0	U	4.1	5.0

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-5897	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-5359	Lab File ID:	HG10622A.PRN
Dilution:	1.0			Initial Weight/Volume:	100 mL
Analysis Date:	06/22/2011 1758			Final Weight/Volume:	100 mL
Prep Date:	06/20/2011 1405				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Client Sample ID: **MW-206B(053111)**

Lab Sample ID: 240-759-6 Date Sampled: 05/31/2011 1700
Client Matrix: Water Date Received: 06/01/2011 0950

6010B Metals (ICP)-Dissolved

Analysis Method:	6010B	Analysis Batch:	240-6343	Instrument ID:	I5
Prep Method:	3005A	Prep Batch:	240-5513	Lab File ID:	I50627A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2011 1044			Final Weight/Volume:	50 mL
Prep Date:	06/21/2011 1230				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	5.0	U	2.2	5.0
Arsenic	10	U	3.2	10
Barium	90	J	0.67	100
Cadmium	2.0	U	0.66	2.0
Chromium	5.0	U	2.2	5.0
Lead	3.0	U	1.9	3.0
Selenium	5.0	U	4.1	5.0

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-5897	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-5359	Lab File ID:	HG10622A.PRN
Dilution:	1.0			Initial Weight/Volume:	100 mL
Analysis Date:	06/22/2011 1739			Final Weight/Volume:	100 mL
Prep Date:	06/20/2011 1405				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

General Chemistry

Client Sample ID: **MW-203B(053111)**

Lab Sample ID: 240-759-1 Date Sampled: 05/31/2011 1300

Client Matrix: Water Date Received: 06/01/2011 0950

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.010	U	mg/L	0.0050	0.010	1.0	9012A
Analysis Batch: 240-4249	Analysis Date: 06/09/2011 1146						
Prep Batch: 240-4179	Prep Date: 06/09/2011 1110						

General Chemistry

Client Sample ID: **FD-1(053111)-TP**

Lab Sample ID: 240-759-2FD
Client Matrix: Water

Date Sampled: 05/31/2011 0000
Date Received: 06/01/2011 0950

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.010	U	mg/L	0.0050	0.010	1.0	9012A

Analysis Batch: 240-4342 Analysis Date: 06/10/2011 1130
Prep Batch: 240-4356 Prep Date: 06/10/2011 1130

General Chemistry

Client Sample ID: **MW-202B(053111)**

Lab Sample ID: 240-759-3 Date Sampled: 05/31/2011 1430

Client Matrix: Water Date Received: 06/01/2011 0950

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.010	U	mg/L	0.0050	0.010	1.0	9012A
Analysis Batch: 240-4342	Analysis Date: 06/10/2011 1130						
Prep Batch: 240-4356	Prep Date: 06/10/2011 1130						

General Chemistry

Client Sample ID: **MW-201B(053111)**

Lab Sample ID: 240-759-4 Date Sampled: 05/31/2011 1545

Client Matrix: Water Date Received: 06/01/2011 0950

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.010	U	mg/L	0.0050	0.010	1.0	9012A
Analysis Batch: 240-4342	Analysis Date: 06/10/2011 1130						
Prep Batch: 240-4356	Prep Date: 06/10/2011 1130						

General Chemistry

Client Sample ID: **EB-1(053111)-TP**

Lab Sample ID: 240-759-5 Date Sampled: 05/31/2011 1600

Client Matrix: Water Date Received: 06/01/2011 0950

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.010	U	mg/L	0.0050	0.010	1.0	9012A
Analysis Batch: 240-4249	Analysis Date: 06/09/2011 1213						
Prep Batch: 240-4179	Prep Date: 06/09/2011 1110						

General Chemistry

Client Sample ID: **MW-206B(053111)**

Lab Sample ID: 240-759-6 Date Sampled: 05/31/2011 1700

Client Matrix: Water Date Received: 06/01/2011 0950

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.010	U	mg/L	0.0050	0.010	1.0	9012A
Analysis Batch: 240-4249	Analysis Date: 06/09/2011 1147						
Prep Batch: 240-4179	Prep Date: 06/09/2011 1110						

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Method Blank - Batch: 240-5513

Method: 6010B
Preparation: 3005A
Total Recoverable

Lab Sample ID:	MB 240-5513/1-A	Analysis Batch:	240-6343	Instrument ID:	I5
Client Matrix:	Water	Prep Batch:	240-5513	Lab File ID:	I50627A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2011 1010	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	06/21/2011 1230				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Silver	5.0	U	2.2	5.0
Arsenic	10	U	3.2	10
Barium	100	U	0.67	100
Cadmium	2.0	U	0.66	2.0
Chromium	5.0	U	2.2	5.0
Lead	3.0	U	1.9	3.0
Selenium	5.0	U	4.1	5.0

Lab Control Sample - Batch: 240-5513

Method: 6010B
Preparation: 3005A
Total Recoverable

Lab Sample ID:	LCS 240-5513/2-A	Analysis Batch:	240-6343	Instrument ID:	I5
Client Matrix:	Water	Prep Batch:	240-5513	Lab File ID:	I50627A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2011 1016	Units:	ug/L	Final Weight/Volume:	50 mL
Prep Date:	06/21/2011 1230				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Silver	50.0	52.2	104	80 - 120	
Arsenic	2000	1900	95	80 - 120	
Barium	2000	2000	100	80 - 120	
Cadmium	50.0	48.5	97	80 - 120	
Chromium	200	195	98	80 - 120	
Lead	500	479	96	80 - 120	
Selenium	2000	1940	97	80 - 120	

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 240-5513

Method: 6010B
Preparation: 3005A
Dissolved

MS Lab Sample ID:	240-759-6	Analysis Batch:	240-6343	Instrument ID:	I5
Client Matrix:	Water	Prep Batch:	240-5513	Lab File ID:	I50627A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2011 1050			Final Weight/Volume:	50 mL
Prep Date:	06/21/2011 1230				
Leach Date:	N/A				

MSD Lab Sample ID:	240-759-6	Analysis Batch:	240-6343	Instrument ID:	I5
Client Matrix:	Water	Prep Batch:	240-5513	Lab File ID:	I50627A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2011 1056			Final Weight/Volume:	50 mL
Prep Date:	06/21/2011 1230				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Silver	101	107	75 - 125	5	20		
Arsenic	97	99	75 - 125	2	20		
Barium	102	104	75 - 125	2	20		
Cadmium	98	99	75 - 125	2	20		
Chromium	99	101	75 - 125	2	20		
Lead	97	99	75 - 125	2	20		
Selenium	98	100	75 - 125	2	20		

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 240-5513

Method: 6010B
Preparation: 3005A
Dissolved

MS Lab Sample ID:	240-759-6	Units:	ug/L	MSD Lab Sample ID:	240-759-6
Client Matrix:	Water			Client Matrix:	Water
Dilution:	1.0			Dilution:	1.0
Analysis Date:	06/27/2011 1050			Analysis Date:	06/27/2011 1056
Prep Date:	06/21/2011 1230			Prep Date:	06/21/2011 1230
Leach Date:	N/A			Leach Date:	N/A

	Sample		MS Spike	MSD Spike	MS	MSD
Analyte	Result/Qual		Amount	Amount	Result/Qual	Result/Qual
Silver	5.0	U	50.0	50.0	50.4	53.3
Arsenic	10	U	2000	2000	1940	1980
Barium	90	J	2000	2000	2120	2170
Cadmium	2.0	U	50.0	50.0	48.8	49.7
Chromium	5.0	U	200	200	197	201
Lead	3.0	U	500	500	484	494
Selenium	5.0	U	2000	2000	1970	2010

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Method Blank - Batch: 240-5359

Method: 7470A
Preparation: 7470A

Lab Sample ID:	MB 240-5359/1-A	Analysis Batch:	240-5897	Instrument ID:	H1
Client Matrix:	Water	Prep Batch:	240-5359	Lab File ID:	HG10622A.PRN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	06/22/2011 1737	Units:	ug/L	Final Weight/Volume:	100 mL
Prep Date:	06/20/2011 1405				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Mercury	0.20	U	0.12	0.20

Lab Control Sample - Batch: 240-5359

Method: 7470A
Preparation: 7470A

Lab Sample ID:	LCS 240-5359/2-A	Analysis Batch:	240-5897	Instrument ID:	H1
Client Matrix:	Water	Prep Batch:	240-5359	Lab File ID:	HG10622A.PRN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	06/22/2011 1738	Units:	ug/L	Final Weight/Volume:	100 mL
Prep Date:	06/20/2011 1405				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	5.00	5.10	102	81 - 123	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 240-5359

Method: 7470A
Preparation: 7470A
Dissolved

MS Lab Sample ID:	240-759-6	Analysis Batch:	240-5897	Instrument ID:	H1
Client Matrix:	Water	Prep Batch:	240-5359	Lab File ID:	HG10622A.PRN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	06/22/2011 1740			Final Weight/Volume:	100 mL
Prep Date:	06/20/2011 1405				
Leach Date:	N/A				

MSD Lab Sample ID:	240-759-6	Analysis Batch:	240-5897	Instrument ID:	H1
Client Matrix:	Water	Prep Batch:	240-5359	Lab File ID:	HG10622A.PRN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	06/22/2011 1742			Final Weight/Volume:	100 mL
Prep Date:	06/20/2011 1405				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Mercury	96	99	69 - 134	3	20		

Client: ARCADIS U.S., Inc.

Job Number: 240-759-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 240-5359

Method: 7470A
Preparation: 7470A
Dissolved

MS Lab Sample ID:	240-759-6	Units:	ug/L
Client Matrix:	Water		
Dilution:	1.0		
Analysis Date:	06/22/2011 1740		
Prep Date:	06/20/2011 1405		
Leach Date:	N/A		

MSD Lab Sample ID:	240-759-6
Client Matrix:	Water
Dilution:	1.0
Analysis Date:	06/22/2011 1742
Prep Date:	06/20/2011 1405
Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Mercury	0.20	U	1.00	1.00	0.962	0.992

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Method Reporting Limit Check - Batch: 240-5707

Method: 7470A
Preparation: 7470A

Lab Sample ID:	MRL 240-5707/9-A	Analysis Batch:	240-5897	Instrument ID:	H1
Client Matrix:	Water	Prep Batch:	240-5707	Lab File ID:	HG10622A.PRN
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	100 mL
Analysis Date:	06/22/2011 1656	Units:	ug/L	Final Weight/Volume:	100 mL
Prep Date:	06/22/2011 1355				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Mercury	0.200	0.190	95		J

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Method Blank - Batch: 240-4179

Method: 9012A
Preparation: 9012A

Lab Sample ID:	MB 240-4179/1-A	Analysis Batch:	240-4249	Instrument ID:	SAURON
Client Matrix:	Water	Prep Batch:	240-4179	Lab File ID:	cn060911b.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/09/2011 1141	Units:	mg/L	Final Weight/Volume:	25 mL
Prep Date:	06/09/2011 1110				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Cyanide, Total	0.010	U	0.0050	0.010

Lab Control Sample - Batch: 240-4179

Method: 9012A
Preparation: 9012A

Lab Sample ID:	LCS 240-4179/2-A	Analysis Batch:	240-4249	Instrument ID:	SAURON
Client Matrix:	Water	Prep Batch:	240-4179	Lab File ID:	cn060911b.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/09/2011 1141	Units:	mg/L	Final Weight/Volume:	25 mL
Prep Date:	06/09/2011 1110				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total	0.0393	0.0431	110	69 - 118	

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 240-4179

Method: 9012A
Preparation: 9012A

MS Lab Sample ID:	240-759-6	Analysis Batch:	240-4249	Instrument ID:	SAURON
Client Matrix:	Water	Prep Batch:	240-4179	Lab File ID:	cn060911b.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/09/2011 1147			Final Weight/Volume:	25 mL
Prep Date:	06/09/2011 1110				
Leach Date:	N/A				

MSD Lab Sample ID:	240-759-6	Analysis Batch:	240-4249	Instrument ID:	SAURON
Client Matrix:	Water	Prep Batch:	240-4179	Lab File ID:	cn060911b.xls
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/09/2011 1147			Final Weight/Volume:	25 mL
Prep Date:	06/09/2011 1110				
Leach Date:	N/A				

	% Rec.						
Analyte	MS	MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Cyanide, Total	103	126	42 - 140	20	20		

Client: ARCADIS U.S., Inc.

Job Number: 240-759-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 240-4179

Method: 9012A
Preparation: 9012A

MS Lab Sample ID:	240-759-6	Units: mg/L	
Client Matrix:	Water		
Dilution:	1.0		
Analysis Date:	06/09/2011 1147		
Prep Date:	06/09/2011 1110		
Leach Date:	N/A		

MSD Lab Sample ID:	240-759-6
Client Matrix:	Water
Dilution:	1.0
Analysis Date:	06/09/2011 1147
Prep Date:	06/09/2011 1110
Leach Date:	N/A

Analyte	Sample Result/Qual		MS Spike Amount	MSD Spike Amount	MS Result/Qual	MSD Result/Qual
Cyanide, Total	0.010	U	0.0400	0.0400	0.0412	0.0505

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Method Reporting Limit Check - Batch: 240-4342

Method: 9012A
Preparation: N/A

Lab Sample ID:	MRL 240-4342/3	Analysis Batch:	240-4342	Instrument ID:	SAURON
Client Matrix:	Water	Prep Batch:	N/A	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	2 mL
Analysis Date:	06/10/2011 1130	Units:	mg/L	Final Weight/Volume:	2 mL
Prep Date:	N/A				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total	0.00500	0.010	68	70 - 130	U ^

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Method Blank - Batch: 240-4356

Method: 9012A
Preparation: 9012A

Lab Sample ID:	MB 240-4356/1-A	Analysis Batch:	240-4342	Instrument ID:	SAURON
Client Matrix:	Water	Prep Batch:	240-4356	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/10/2011 1130	Units:	mg/L	Final Weight/Volume:	25 mL
Prep Date:	06/10/2011 1130				
Leach Date:	N/A				

Analyte	Result	Qual	MDL	RL
Cyanide, Total	0.010	U	0.0050	0.010

Lab Control Sample - Batch: 240-4356

Method: 9012A
Preparation: 9012A

Lab Sample ID:	LCS 240-4356/2-A	Analysis Batch:	240-4342	Instrument ID:	SAURON
Client Matrix:	Water	Prep Batch:	240-4356	Lab File ID:	N/A
Dilution:	1.0	Leach Batch:	N/A	Initial Weight/Volume:	50 mL
Analysis Date:	06/10/2011 1130	Units:	mg/L	Final Weight/Volume:	25 mL
Prep Date:	06/10/2011 1130				
Leach Date:	N/A				

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Cyanide, Total	0.393	0.453	115	69 - 118	

DATA REPORTING QUALIFIERS

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Lab Section	Qualifier	Description
Metals		
	^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
	U	Indicates the analyte was analyzed for but not detected.
	J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
General Chemistry		
	^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC exceeds the control limits.
	U	Indicates the analyte was analyzed for but not detected.

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Prep Batch: 240-5359					
LCS 240-5359/2-A	Lab Control Sample	T	Water	7470A	
MB 240-5359/1-A	Method Blank	T	Water	7470A	
240-759-1	MW-203B(053111)	D	Water	7470A	
240-759-2FD	FD-1(053111)-TP	D	Water	7470A	
240-759-3	MW-202B(053111)	D	Water	7470A	
240-759-4	MW-201B(053111)	D	Water	7470A	
240-759-5	EB-1(053111)-TP	D	Water	7470A	
240-759-6	MW-206B(053111)	D	Water	7470A	
240-759-6MS	Matrix Spike	D	Water	7470A	
240-759-6MSD	Matrix Spike Duplicate	D	Water	7470A	
Prep Batch: 240-5513					
LCS 240-5513/2-A	Lab Control Sample	R	Water	3005A	
MB 240-5513/1-A	Method Blank	R	Water	3005A	
240-759-1	MW-203B(053111)	D	Water	3005A	
240-759-2FD	FD-1(053111)-TP	D	Water	3005A	
240-759-3	MW-202B(053111)	D	Water	3005A	
240-759-4	MW-201B(053111)	D	Water	3005A	
240-759-5	EB-1(053111)-TP	D	Water	3005A	
240-759-6	MW-206B(053111)	D	Water	3005A	
240-759-6MS	Matrix Spike	D	Water	3005A	
240-759-6MSD	Matrix Spike Duplicate	D	Water	3005A	
Analysis Batch:240-5897					
LCS 240-5359/2-A	Lab Control Sample	T	Water	7470A	240-5359
MB 240-5359/1-A	Method Blank	T	Water	7470A	240-5359
240-759-1	MW-203B(053111)	D	Water	7470A	240-5359
240-759-2FD	FD-1(053111)-TP	D	Water	7470A	240-5359
240-759-3	MW-202B(053111)	D	Water	7470A	240-5359
240-759-4	MW-201B(053111)	D	Water	7470A	240-5359
240-759-5	EB-1(053111)-TP	D	Water	7470A	240-5359
240-759-6	MW-206B(053111)	D	Water	7470A	240-5359
240-759-6MS	Matrix Spike	D	Water	7470A	240-5359
240-759-6MSD	Matrix Spike Duplicate	D	Water	7470A	240-5359

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
Metals					
Analysis Batch:240-6343					
LCS 240-5513/2-A	Lab Control Sample	R	Water	6010B	240-5513
MB 240-5513/1-A	Method Blank	R	Water	6010B	240-5513
240-759-1	MW-203B(053111)	D	Water	6010B	240-5513
240-759-2FD	FD-1(053111)-TP	D	Water	6010B	240-5513
240-759-3	MW-202B(053111)	D	Water	6010B	240-5513
240-759-4	MW-201B(053111)	D	Water	6010B	240-5513
240-759-5	EB-1(053111)-TP	D	Water	6010B	240-5513
240-759-6	MW-206B(053111)	D	Water	6010B	240-5513
240-759-6MS	Matrix Spike	D	Water	6010B	240-5513
240-759-6MSD	Matrix Spike Duplicate	D	Water	6010B	240-5513

Report Basis

D = Dissolved

R = Total Recoverable

T = Total

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
General Chemistry					
Prep Batch: 240-4179					
LCS 240-4179/2-A	Lab Control Sample	T	Water	9012A	
MB 240-4179/1-A	Method Blank	T	Water	9012A	
240-759-1	MW-203B(053111)	T	Water	9012A	
240-759-5	EB-1(053111)-TP	T	Water	9012A	
240-759-6	MW-206B(053111)	T	Water	9012A	
240-759-6MS	Matrix Spike	T	Water	9012A	
240-759-6MSD	Matrix Spike Duplicate	T	Water	9012A	
Analysis Batch:240-4249					
LCS 240-4179/2-A	Lab Control Sample	T	Water	9012A	240-4179
MB 240-4179/1-A	Method Blank	T	Water	9012A	240-4179
240-759-1	MW-203B(053111)	T	Water	9012A	240-4179
240-759-5	EB-1(053111)-TP	T	Water	9012A	240-4179
240-759-6	MW-206B(053111)	T	Water	9012A	240-4179
240-759-6MS	Matrix Spike	T	Water	9012A	240-4179
240-759-6MSD	Matrix Spike Duplicate	T	Water	9012A	240-4179
Analysis Batch:240-4342					
LCS 240-4356/2-A	Lab Control Sample	T	Water	9012A	240-4356
MB 240-4356/1-A	Method Blank	T	Water	9012A	240-4356
240-759-2FD	FD-1(053111)-TP	T	Water	9012A	240-4356
240-759-3	MW-202B(053111)	T	Water	9012A	240-4356
240-759-4	MW-201B(053111)	T	Water	9012A	240-4356
Prep Batch: 240-4356					
LCS 240-4356/2-A	Lab Control Sample	T	Water	9012A	
MB 240-4356/1-A	Method Blank	T	Water	9012A	
240-759-2FD	FD-1(053111)-TP	T	Water	9012A	
240-759-3	MW-202B(053111)	T	Water	9012A	
240-759-4	MW-201B(053111)	T	Water	9012A	

Report Basis
T = Total

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Laboratory Chronicle

Lab ID: 240-759-1 **Client ID:** MW-203B(053111)

Sample Date/Time: 05/31/2011 13:00 Received Date/Time: 06/01/2011 09:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	240-759-B-1-B		240-6343	240-5513	06/21/2011 12:30	1	TAL NC	LM
A:6010B	240-759-B-1-B		240-6343	240-5513	06/27/2011 12:07	1	TAL NC	BD
P:7470A	240-759-B-1-A		240-5897	240-5359	06/20/2011 14:05	1	TAL NC	LM
A:7470A	240-759-B-1-A		240-5897	240-5359	06/22/2011 17:52	1	TAL NC	RT
P:9012A	240-759-A-1-A		240-4249	240-4179	06/09/2011 11:10	1	TAL NC	KH
A:9012A	240-759-A-1-A		240-4249	240-4179	06/09/2011 11:46	1	TAL NC	KH

Lab ID: 240-759-2 **Client ID:** FD-1(053111)-TP

Sample Date/Time: 05/31/2011 00:00 Received Date/Time: 06/01/2011 09:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	240-759-B-2-B		240-6343	240-5513	06/21/2011 12:30	1	TAL NC	LM
A:6010B	240-759-B-2-B		240-6343	240-5513	06/27/2011 12:13	1	TAL NC	BD
P:7470A	240-759-B-2-A		240-5897	240-5359	06/20/2011 14:05	1	TAL NC	LM
A:7470A	240-759-B-2-A		240-5897	240-5359	06/22/2011 17:53	1	TAL NC	RT
P:9012A	240-759-A-2-B		240-4342	240-4356	06/10/2011 11:30	1	TAL NC	BR
A:9012A	240-759-A-2-B		240-4342	240-4356	06/10/2011 11:30	1	TAL NC	BR

Lab ID: 240-759-3 **Client ID:** MW-202B(053111)

Sample Date/Time: 05/31/2011 14:30 Received Date/Time: 06/01/2011 09:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	240-759-B-3-B		240-6343	240-5513	06/21/2011 12:30	1	TAL NC	LM
A:6010B	240-759-B-3-B		240-6343	240-5513	06/27/2011 12:30	1	TAL NC	BD
P:7470A	240-759-B-3-A		240-5897	240-5359	06/20/2011 14:05	1	TAL NC	LM
A:7470A	240-759-B-3-A		240-5897	240-5359	06/22/2011 17:55	1	TAL NC	RT
P:9012A	240-759-A-3-B		240-4342	240-4356	06/10/2011 11:30	1	TAL NC	BR
A:9012A	240-759-A-3-B		240-4342	240-4356	06/10/2011 11:30	1	TAL NC	BR

Lab ID: 240-759-4 **Client ID:** MW-201B(053111)

Sample Date/Time: 05/31/2011 15:45 Received Date/Time: 06/01/2011 09:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	240-759-B-4-B		240-6343	240-5513	06/21/2011 12:30	1	TAL NC	LM
A:6010B	240-759-B-4-B		240-6343	240-5513	06/27/2011 12:35	1	TAL NC	BD
P:7470A	240-759-B-4-A		240-5897	240-5359	06/20/2011 14:05	1	TAL NC	LM
A:7470A	240-759-B-4-A		240-5897	240-5359	06/22/2011 17:56	1	TAL NC	RT
P:9012A	240-759-A-4-B		240-4342	240-4356	06/10/2011 11:30	1	TAL NC	BR
A:9012A	240-759-A-4-B		240-4342	240-4356	06/10/2011 11:30	1	TAL NC	BR

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Laboratory Chronicle

Lab ID: 240-759-5 **Client ID:** EB-1(053111)-TP

Sample Date/Time: 05/31/2011 16:00 Received Date/Time: 06/01/2011 09:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	240-759-B-5-B		240-6343	240-5513	06/21/2011 12:30	1	TAL NC	LM
A:6010B	240-759-B-5-B		240-6343	240-5513	06/27/2011 12:41	1	TAL NC	BD
P:7470A	240-759-B-5-A		240-5897	240-5359	06/20/2011 14:05	1	TAL NC	LM
A:7470A	240-759-B-5-A		240-5897	240-5359	06/22/2011 17:58	1	TAL NC	RT
P:9012A	240-759-A-5-A		240-4249	240-4179	06/09/2011 11:10	1	TAL NC	KH
A:9012A	240-759-A-5-A		240-4249	240-4179	06/09/2011 12:13	1	TAL NC	KH

Lab ID: 240-759-6 **Client ID:** MW-206B(053111)

Sample Date/Time: 05/31/2011 17:00 Received Date/Time: 06/01/2011 09:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	240-759-E-6-A		240-6343	240-5513	06/21/2011 12:30	1	TAL NC	LM
A:6010B	240-759-E-6-A		240-6343	240-5513	06/27/2011 10:44	1	TAL NC	BD
P:7470A	240-759-D-6-A		240-5897	240-5359	06/20/2011 14:05	1	TAL NC	LM
A:7470A	240-759-D-6-A		240-5897	240-5359	06/22/2011 17:39	1	TAL NC	RT
P:9012A	240-759-A-6-A		240-4249	240-4179	06/09/2011 11:10	1	TAL NC	KH
A:9012A	240-759-A-6-A		240-4249	240-4179	06/09/2011 11:47	1	TAL NC	KH

Lab ID: 240-759-6 **Client ID:** MW-206B(053111)

Sample Date/Time: 05/31/2011 17:00 Received Date/Time: 06/01/2011 09:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	240-759-E-6-B MS		240-6343	240-5513	06/21/2011 12:30	1	TAL NC	LM
A:6010B	240-759-E-6-B MS		240-6343	240-5513	06/27/2011 10:50	1	TAL NC	BD
P:7470A	240-759-D-6-B MS		240-5897	240-5359	06/20/2011 14:05	1	TAL NC	LM
A:7470A	240-759-D-6-B MS		240-5897	240-5359	06/22/2011 17:40	1	TAL NC	RT
P:9012A	240-759-A-6-B MS		240-4249	240-4179	06/09/2011 11:10	1	TAL NC	KH
A:9012A	240-759-A-6-B MS		240-4249	240-4179	06/09/2011 11:47	1	TAL NC	KH

Lab ID: 240-759-6 **Client ID:** MW-206B(053111)

Sample Date/Time: 05/31/2011 17:00 Received Date/Time: 06/01/2011 09:50

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	240-759-E-6-C MSD		240-6343	240-5513	06/21/2011 12:30	1	TAL NC	LM
A:6010B	240-759-E-6-C MSD		240-6343	240-5513	06/27/2011 10:56	1	TAL NC	BD
P:7470A	240-759-D-6-C MSD		240-5897	240-5359	06/20/2011 14:05	1	TAL NC	LM
A:7470A	240-759-D-6-C MSD		240-5897	240-5359	06/22/2011 17:42	1	TAL NC	RT
P:9012A	240-759-A-6-C MSD		240-4249	240-4179	06/09/2011 11:10	1	TAL NC	KH
A:9012A	240-759-A-6-C MSD		240-4249	240-4179	06/09/2011 11:47	1	TAL NC	KH

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Laboratory Chronicle

Lab ID: MB **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	MB 240-5513/1-A		240-6343	240-5513	06/21/2011 12:30	1	TAL NC	LM
A:6010B	MB 240-5513/1-A		240-6343	240-5513	06/27/2011 10:10	1	TAL NC	BD
P:7470A	MB 240-5359/1-A		240-5897	240-5359	06/20/2011 14:05	1	TAL NC	LM
A:7470A	MB 240-5359/1-A		240-5897	240-5359	06/22/2011 17:37	1	TAL NC	RT
P:9012A	MB 240-4179/1-A		240-4249	240-4179	06/09/2011 11:10	1	TAL NC	KH
A:9012A	MB 240-4179/1-A		240-4249	240-4179	06/09/2011 11:41	1	TAL NC	KH
P:9012A	MB 240-4356/1-A		240-4342	240-4356	06/10/2011 11:30	1	TAL NC	BR
A:9012A	MB 240-4356/1-A		240-4342	240-4356	06/10/2011 11:30	1	TAL NC	BR

Lab ID: LCS **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:3005A	LCS 240-5513/2-A		240-6343	240-5513	06/21/2011 12:30	1	TAL NC	LM
A:6010B	LCS 240-5513/2-A		240-6343	240-5513	06/27/2011 10:16	1	TAL NC	BD
P:7470A	LCS 240-5359/2-A		240-5897	240-5359	06/20/2011 14:05	1	TAL NC	LM
A:7470A	LCS 240-5359/2-A		240-5897	240-5359	06/22/2011 17:38	1	TAL NC	RT
P:9012A	LCS 240-4179/2-A		240-4249	240-4179	06/09/2011 11:10	1	TAL NC	KH
A:9012A	LCS 240-4179/2-A		240-4249	240-4179	06/09/2011 11:41	1	TAL NC	KH
P:9012A	LCS 240-4356/2-A		240-4342	240-4356	06/10/2011 11:30	1	TAL NC	BR
A:9012A	LCS 240-4356/2-A		240-4342	240-4356	06/10/2011 11:30	1	TAL NC	BR

Lab ID: MRL **Client ID: N/A**

Sample Date/Time: N/A Received Date/Time: N/A

Method	Bottle ID	Run	Analysis Batch	Prep Batch	Date Prepared / Analyzed	Dil	Lab	Analyst
P:7470A	MRL 240-5707/9-A		240-5897	240-5707	06/22/2011 13:55	1	TAL NC	DE
A:7470A	MRL 240-5707/9-A		240-5897	240-5707	06/22/2011 16:56	1	TAL NC	RT
A:9012A	MRL 240-4342/3		240-4342		06/10/2011 11:30	1	TAL NC	BR

Lab References:
TAL NC = TestAmerica North Canton

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MTAGSPIKEW_00005	10/01/11	06/09/11	DIWATER, Lot DIWATER	500 mL	MTAGPREP_00001	1.25 mL	Silver	2500 ug/L
.MTAGPREP_00001	10/01/11	High Purity Standards, Lot 1008117			(Purchased Reagent)		Silver	1000 ug/mL
MTHGCALW_00034	06/22/11	06/22/11	DIWATER, Lot DIWATER	100 mL	MTHGCAL_00003	1 mL	Mercury	100 ug/L
.MTHGCAL_00003	10/12/11	High Purity, Lot 1028411			(Purchased Reagent)		Mercury	10 ug/mL
MTHGICVW_00053	06/20/11	06/20/11	DIWATER, Lot DIWATER	100 mL	MTHgStd_00002	1 mL	Mercury	100 ug/L
.MTHgStd_00002	10/06/12	CPI, Lot 11D047			(Purchased Reagent)		Mercury	10 ug/mL
MTHGICVW_00055	06/22/11	06/22/11	DIWATER, Lot DIWATER	100 mL	MTHgStd_00002	1 mL	Mercury	100 ug/L
.MTHgStd_00002	10/06/12	CPI, Lot 11D047			(Purchased Reagent)		Mercury	10 ug/mL
MTICP1_00005	11/26/11	05/26/11	DIWATER, Lot DI WATER	1000 mL	MTICPSPIKE1A_00002	50 mL	Arsenic	100000 ug/L
							Barium	100000 ug/L
							Cadmium	2500 ug/L
							Chromium	10000 ug/L
							Lead	25000 ug/L
							Selenium	100000 ug/L
.MTICPSPIKE1A_00002	02/22/12	High Purity Standards, Lot 1105228			(Purchased Reagent)		Arsenic	2000 ug/mL
							Barium	2000 ug/mL
							Cadmium	50 ug/mL
							Chromium	200 ug/mL
							Lead	500 ug/mL
							Selenium	2000 ug/mL
MTTRCCV_00007	12/07/11	06/13/11	DIWATER, Lot DIWATER	2000 mL	MTTRCAL3_00002	1 mL	Arsenic	500 ug/L
							Cadmium	500 ug/L
							Lead	500 ug/L
							Selenium	500 ug/L
					MTTRCAL4_00004	4 mL	Barium	2000 ug/L
							Chromium	2000 ug/L
					MTTRCAL5_00003	10 mL	Silver	1000 ug/L
.MTTRCAL3_00002	05/09/12	HIGH PURITY STANDARDS, Lot 1111016			(Purchased Reagent)		Arsenic	1000 mg/L
							Cadmium	1000 mg/L
							Lead	1000 mg/L
							Selenium	1000 mg/L
.MTTRCAL4_00004	03/16/12	HIGH PURITY STANDARDS, Lot 1107507			(Purchased Reagent)		Barium	1000 ug/mL
							Chromium	1000 ug/mL
.MTTRCAL5_00003	04/01/12	HIGH PURITY STANDARDS, Lot 1109815			(Purchased Reagent)		Silver	200 mg/L
MTTRCRIW_00003	08/02/11	05/10/11	DIWATER, Lot DIWATER	1000 mL	MTTRCRI_00001	10 mL	Arsenic	15 ug/L
							Barium	10 ug/L
							Cadmium	5 ug/L
							Chromium	5 ug/L
							Lead	10 ug/L
							Selenium	20 ug/L
							Silver	5 ug/L
.MTTRCRI_00001	08/02/11	HIGH PURITY STANDARDS, Lot 1021112			(Purchased Reagent)		Arsenic	1.5 ug/mL
							Barium	1 ug/mL
							Cadmium	0.5 ug/mL
							Chromium	0.5 ug/mL
							Lead	1 ug/mL
							Selenium	2 ug/mL
							Silver	0.5 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
MTTRICSABW_00004	09/29/11	05/17/11	DIWATER, Lot DIWATER	1000 mL	MTTRICSA_00005	100 mL	Al	500000 ug/L
							Ca	500000 ug/L
							Fe	200000 ug/L
							Mg	500000 ug/L
					MTTRICSAB_00001	100 mL	Arsenic	1000 ug/L
							Barium	500 ug/L
							Be	500 ug/L
							Cadmium	1000 ug/L
							Chromium	500 ug/L
							Co	500 ug/L
							Cu	500 ug/L
							K	10000 ug/L
							Lead	1000 ug/L
							Mn	500 ug/L
							Mo	1000 ug/L
							Na	10000 ug/L
							Ni	1000 ug/L
							Sb	1000 ug/L
							Selenium	1000 ug/L
							Silver	1000 ug/L
							Tl	1000 ug/L
							V	500 ug/L
							Zn	1000 ug/L
					MTTRICV4_00001	4 mL	B	1000 ug/L
							Sn	1000 ug/L
							Ti	1000 ug/L
.MTTRICSA_00005	05/02/12		HIGH PURITY STANDARDS, Lot 1029509		(Purchased Reagent)		Al	5000 ug/mL
							Ca	5000 ug/mL
							Fe	2000 ug/mL
							Mg	5000 ug/mL
.MTTRICSAB_00001	09/29/11		HIGH PURITY STANDARDS, Lot 1027022		(Purchased Reagent)		Arsenic	10 ug/mL
							Barium	5 ug/mL
							Be	5 ug/mL
							Cadmium	10 ug/mL
							Chromium	5 ug/mL
							Co	5 ug/mL
							Cu	5 ug/mL
							K	100 ug/mL
							Lead	10 ug/mL
							Mn	5 ug/mL
							Mo	10 ug/mL
							Na	100 ug/mL
							Ni	10 ug/mL
							Sb	10 ug/mL
							Selenium	10 ug/mL
							Silver	10 ug/mL
							Tl	10 ug/mL
							V	5 ug/mL
							Zn	10 ug/mL
.MTTRICV4_00001	02/26/12		CPI, Lot 10H225		(Purchased Reagent)		B	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Sn	250 ug/mL
							Ti	250 ug/mL
MTTRICSAW_00005	11/17/11	05/17/11	DIWATER, Lot DIWATER	1000 mL	MTTRICSA_00005	100 mL	Al	500000 ug/L
							Ca	500000 ug/L
							Fe	200000 ug/L
							Mg	500000 ug/L
.MTTRICSA_00005	05/02/12	HIGH PURITY STANDARDS, Lot 1029509			(Purchased Reagent)		Al	5000 ug/mL
							Ca	5000 ug/mL
							Fe	2000 ug/mL
							Mg	5000 ug/mL
MTTRICV_00007	07/26/11	04/21/11	DIWATER, Lot DIWATER	1000 mL	MTTRICV3_00001	4 mL	Barium	1000 ug/L
							Chromium	1000 ug/L
					MTTRICV5_00003	1 mL	Arsenic	250 ug/L
							Cadmium	250 ug/L
							Lead	250 ug/L
							Selenium	250 ug/L
					MTTRICVAG_00002	5 mL	Silver	500 ug/L
.MTTRICV3_00001	06/15/12	CPI, Lot 10L109			(Purchased Reagent)		Barium	250 ug/mL
							Chromium	250 ug/mL
.MTTRICV5_00003	07/26/11	CPI, Lot 10A246			(Purchased Reagent)		Arsenic	250 ug/mL
							Cadmium	250 ug/mL
							Lead	250 ug/mL
							Selenium	250 ug/mL
.MTTRICVAG_00002	06/15/12	CPI, Lot 10L111			(Purchased Reagent)		Silver	100 ug/mL
WCCN.005MRL1_00011	06/10/11	06/26/11	NAOH, Lot J35N90	100 mL	WCCN10PPM1_00009	0.05 mL	Cyanide, Total	0.005 mg/L
.WCCN10PPM1_00009	06/02/11	05/26/11	NAOH, Lot 011177	100 mL	WCCN1000PPM_00001	1 mL	Cyanide, Total	10 mg/L
..WCCN1000PPM_00001	09/11/11	LABCHEM, Lot A069-06			(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCCN.1CCV1_00010	06/10/11	06/26/11	NAOH, Lot J35N90	100 mL	WCCN10PPM1_00009	1 mL	Cyanide, Total	0.1 mg/L
.WCCN10PPM1_00009	06/02/11	05/26/11	NAOH, Lot 011177	100 mL	WCCN1000PPM_00001	1 mL	Cyanide, Total	10 mg/L
..WCCN1000PPM_00001	09/11/11	LABCHEM, Lot A069-06			(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCCN.1ICV2_00010	06/10/11	06/26/11	NAOH, Lot 011191	100 mL	WCCN10PPM2_00009	1 mL	Cyanide, Total	0.1 mg/L
.WCCN10PPM2_00009	06/02/11	05/26/11	NAOH, Lot J35N90	100 mL	WCCN1000PPM2_00002	1 mL	Cyanide, Total	10 mg/L
..WCCN1000PPM2_00002	08/15/11	LabChem Inc, Lot a041-26			(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCCN10PPM1_00010	06/10/11	05/03/11	NAOH, Lot 011177	100 mL	WCCN1000PPM_00001	1 mL	Cyanide, Total	10 mg/L
.WCCN1000PPM_00001	09/11/11	LABCHEM, Lot A069-06			(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCCN1PPMMSD2_00011	06/10/11	06/03/11	NAOH, Lot J35N90	200 mL	WCCN10PPM2_00009	20 mL	Cyanide, Total	1 mg/L
.WCCN10PPM2_00009	06/02/11	05/26/11	NAOH, Lot J35N90	100 mL	WCCN1000PPM2_00002	1 mL	Cyanide, Total	10 mg/L
..WCCN1000PPM2_00002	08/15/11	LabChem Inc, Lot a041-26			(Purchased Reagent)		Cyanide, Total	1000 mg/L
WCCNLCS_00003	11/30/12	ERA, Lot Q029-502			(Purchased Reagent)		Cyanide, Total	0.393 mg/L

Certification Summary

Client: ARCADIS U.S., Inc. TestAmerica Job ID: 240-759-1

Project/Site: Former AGT Surface Impoundment-IN000297.

Laboratory	Authority	Program	EPA Region	Certification ID
TestAmerica North Canton	ACLASS	DoD ELAP		ADE-1437
TestAmerica North Canton	California	NELAC	9	01144CA
TestAmerica North Canton	Connecticut	State Program	1	PH-0590
TestAmerica North Canton	Florida	NELAC	4	E87225
TestAmerica North Canton	Georgia	Georgia EPD	4	N/A
TestAmerica North Canton	Illinois	NELAC	5	200004
TestAmerica North Canton	Kansas	NELAC	7	E-10336
TestAmerica North Canton	Kentucky	State Program	4	58
TestAmerica North Canton	Minnesota	NELAC	5	039-999-348
TestAmerica North Canton	Nevada	State Program	9	OH-000482008A
TestAmerica North Canton	New Jersey	NELAC	2	OH001
TestAmerica North Canton	New York	NELAC	2	10975
TestAmerica North Canton	New York	NELAC	2	10975
TestAmerica North Canton	Ohio	OVAP	5	CL0024
TestAmerica North Canton	Pennsylvania	NELAC	3	68-00340
TestAmerica North Canton	USDA	USDA		P330-08-00123
TestAmerica North Canton	West Virginia	West Virginia DEP	3	210
TestAmerica North Canton	Wisconsin	State Program	5	999518190

Accreditation may not be offered or required for all methods and analytes reported in this package. Please contact your project manager for the laboratory's current list of certified methods and analytes.

METALS

COVER PAGE
METALS

Lab Name: TestAmerica North Canton Job Number: 240-759-1

SDG No.:

Project: Former AGT Surface Impoundment-IN000297.

Client Sample ID	Lab Sample ID
MW-203B(053111)	240-759-1
FD-1(053111)-TP	240-759-2
MW-202B(053111)	240-759-3
MW-201B(053111)	240-759-4
EB-1(053111)-TP	240-759-5
MW-206B(053111)	240-759-6

Comments:

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MW-203B(053111) Lab Sample ID: 240-759-1

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG ID.:

Matrix: Water Date Sampled: 05/31/2011 13:00

Reporting Basis: WET Date Received: 06/01/2011 09:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	5.0	5.0	2.2	ug/L	U		1	6010B
7440-38-2	Arsenic	10	10	3.2	ug/L	U		1	6010B
7440-39-3	Barium	30	100	0.67	ug/L	J		1	6010B
7440-43-9	Cadmium	2.0	2.0	0.66	ug/L	U		1	6010B
7440-47-3	Chromium	5.0	5.0	2.2	ug/L	U		1	6010B
7439-92-1	Lead	3.0	3.0	1.9	ug/L	U		1	6010B
7782-49-2	Selenium	5.0	5.0	4.1	ug/L	U		1	6010B
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: FD-1(053111)-TP
Lab Sample ID: 240-759-2
Lab Name: TestAmerica North Canton
Job No.: 240-759-1
SDG ID.:
Matrix: Water
Date Sampled: 05/31/2011 00:00
Reporting Basis: WET
Date Received: 06/01/2011 09:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	5.0	5.0	2.2	ug/L	U		1	6010B
7440-38-2	Arsenic	10	10	3.2	ug/L	U		1	6010B
7440-39-3	Barium	32	100	0.67	ug/L	J		1	6010B
7440-43-9	Cadmium	2.0	2.0	0.66	ug/L	U		1	6010B
7440-47-3	Chromium	5.0	5.0	2.2	ug/L	U		1	6010B
7439-92-1	Lead	3.0	3.0	1.9	ug/L	U		1	6010B
7782-49-2	Selenium	5.0	5.0	4.1	ug/L	U		1	6010B
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MW-202B(053111) Lab Sample ID: 240-759-3

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG ID.:

Matrix: Water Date Sampled: 05/31/2011 14:30

Reporting Basis: WET Date Received: 06/01/2011 09:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	5.0	5.0	2.2	ug/L	U		1	6010B
7440-38-2	Arsenic	10	10	3.2	ug/L	U		1	6010B
7440-39-3	Barium	35	100	0.67	ug/L	J		1	6010B
7440-43-9	Cadmium	2.0	2.0	0.66	ug/L	U		1	6010B
7440-47-3	Chromium	2.6	5.0	2.2	ug/L	J	^	1	6010B
7439-92-1	Lead	3.0	3.0	1.9	ug/L	U		1	6010B
7782-49-2	Selenium	5.0	5.0	4.1	ug/L	U		1	6010B
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MW-201B(053111) Lab Sample ID: 240-759-4

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG ID.:

Matrix: Water Date Sampled: 05/31/2011 15:45

Reporting Basis: WET Date Received: 06/01/2011 09:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	5.0	5.0	2.2	ug/L	U		1	6010B
7440-38-2	Arsenic	4.5	10	3.2	ug/L	J		1	6010B
7440-39-3	Barium	11	100	0.67	ug/L	J		1	6010B
7440-43-9	Cadmium	2.0	2.0	0.66	ug/L	U		1	6010B
7440-47-3	Chromium	5.0	5.0	2.2	ug/L	U		1	6010B
7439-92-1	Lead	3.0	3.0	1.9	ug/L	U		1	6010B
7782-49-2	Selenium	5.0	5.0	4.1	ug/L	U		1	6010B
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: EB-1(053111)-TP
Lab Sample ID: 240-759-5
Lab Name: TestAmerica North Canton
Job No.: 240-759-1
SDG ID.:
Matrix: Water
Date Sampled: 05/31/2011 16:00
Reporting Basis: WET
Date Received: 06/01/2011 09:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	5.0	5.0	2.2	ug/L	U		1	6010B
7440-38-2	Arsenic	10	10	3.2	ug/L	U		1	6010B
7440-39-3	Barium	100	100	0.67	ug/L	U		1	6010B
7440-43-9	Cadmium	2.0	2.0	0.66	ug/L	U		1	6010B
7440-47-3	Chromium	5.0	5.0	2.2	ug/L	U		1	6010B
7439-92-1	Lead	3.0	3.0	1.9	ug/L	U		1	6010B
7782-49-2	Selenium	5.0	5.0	4.1	ug/L	U		1	6010B
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - DISSOLVED

Client Sample ID: MW-206B(053111) Lab Sample ID: 240-759-6

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG ID.:

Matrix: Water Date Sampled: 05/31/2011 17:00

Reporting Basis: WET Date Received: 06/01/2011 09:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7440-22-4	Silver	5.0	5.0	2.2	ug/L	U		1	6010B
7440-38-2	Arsenic	10	10	3.2	ug/L	U		1	6010B
7440-39-3	Barium	90	100	0.67	ug/L	J		1	6010B
7440-43-9	Cadmium	2.0	2.0	0.66	ug/L	U		1	6010B
7440-47-3	Chromium	5.0	5.0	2.2	ug/L	U		1	6010B
7439-92-1	Lead	3.0	3.0	1.9	ug/L	U		1	6010B
7782-49-2	Selenium	5.0	5.0	4.1	ug/L	U		1	6010B
7439-97-6	Mercury	0.20	0.20	0.12	ug/L	U		1	7470A

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

ICV Source: MTTRICV_00007 Concentration Units: ug/L

CCV Source: MTTRCCV_00007

Analyte	ICV 240-6343/4 06/27/2011 09:25				CCV 240-6343/10 06/27/2011 09:59				CCV 240-6343/22 06/27/2011 11:07			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	246		250	98	484		500	97	457		500	91
Barium	991		1000	99	2020		2000	101	2070		2000	103
Cadmium	246		250	99	488		500	98	453		500	91
Chromium	1010		1000	101	2000		2000	100	1910		2000	95
Lead	246		250	98	490		500	98	457		500	91
Selenium	241		250	96	485		500	97	457		500	91
Silver	500		500	100	1000		1000	100	1000		1000	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

ICV Source: MTTRICV_00007 Concentration Units: ug/L

CCV Source: MTTRCCV_00007

Analyte	CCV 240-6343/34 06/27/2011 12:18				CCV 240-6343/46 06/27/2011 13:28							
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Arsenic	475		500	95	451		500	90				
Barium	2000		2000	100	2040		2000	102				
Cadmium	480		500	96	450		500	90				
Chromium	1970		2000	98	1890		2000	94				
Lead	479		500	96	449		500	90				
Selenium	475		500	95	451		500	90				
Silver	997		1000	100	1000		1000	100				

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

ICV Source: MTHGICVW_00055 Concentration Units: ug/L

CCV Source: MTHGCALW_00034

Analyte	ICV 240-5707/7-A 06/22/2011 16:54				CCV 240-5707/10-A 06/22/2011 17:29				CCV 240-5707/10-A 06/22/2011 17:44			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	2.60		2.50	104	5.07		5.00	101	5.02		5.00	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

ICV Source: MTHGICVW_00055 Concentration Units: ug/L

CCV Source: MTHGCALW_00034

Analyte	CCV 240-5707/10-A 06/22/2011 18:00											
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Mercury	4.99		5.00	100								

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Method: 6010B Instrument ID: I5

Lab Sample ID: CRI 240-6343/6 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIW_00003

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Silver	5.00	5.54		111	50-150
Arsenic	15.0	13.8		92	50-150
Barium	10.0	10.1	J	101	50-150
Cadmium	5.00	4.69		94	50-150
Chromium	5.00	4.63	J	93	50-150
Lead	10.0	9.77		98	50-150
Selenium	20.0	19.1		96	50-150

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICBIS 240-6343/5 06/27/2011 09:31		CCB 240-6343/11 06/27/2011 10:05		CCB 240-6343/23 06/27/2011 11:13		CCB 240-6343/35 06/27/2011 12:24	
		Found	C	Found	C	Found	C	Found	C
Arsenic	10	10	U	10	U	10	U	10	U
Barium	200	200	U	200	U	200	U	200	U
Cadmium	2.0	2.0	U	2.0	U	2.0	U	2.0	U
Chromium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Lead	3.0	3.0	U	3.0	U	3.0	U	3.0	U
Selenium	5.0	5.0	U	5.0	U	5.0	U	5.0	U
Silver	5.0	5.0	U	5.0	U	5.0	U	5.0	U

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	CCB 240-6343/47 06/27/2011 13:33							
		Found	C	Found	C	Found	C	Found	C
Arsenic	10	4.22	J						
Barium	200	200	U						
Cadmium	2.0	2.0	U						
Chromium	5.0	5.82							
Lead	3.0	3.0	U						
Selenium	5.0	5.0	U						
Silver	5.0	8.05							

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-5707/8-A 06/22/2011 16:55		CCB 240-5707/12-A 06/22/2011 17:30		CCB 240-5707/12-A 06/22/2011 17:46		CCB 240-5707/12-A 06/22/2011 18:02	
		Found	C	Found	C	Found	C	Found	C
Mercury	0.20	0.20	U	0.20	U	0.20	U	0.20	U

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-5513/1-A

Instrument Code: I5 Batch No.: 6343

CAS No.	Analyte	Concentration	C	Q	Method
7440-22-4	Silver	5.0	U		6010B
7440-38-2	Arsenic	10	U		6010B
7440-39-3	Barium	100	U		6010B
7440-43-9	Cadmium	2.0	U		6010B
7440-47-3	Chromium	5.0	U		6010B
7439-92-1	Lead	3.0	U		6010B
7782-49-2	Selenium	5.0	U		6010B

3-IN
METHOD BLANK
METALS

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-5359/1-A

Instrument Code: H1 Batch No.: 5897

CAS No.	Analyte	Concentration	C	Q	Method
7439-97-6	Mercury	0.20	U		7470A

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Lab Sample ID: ICSA 240-6343/8 Instrument ID: I5

Lab File ID: I50627A ICS Source: MTTRICSAW_00005

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Arsenic		**0.899**	
Barium		**2.21**	
Cadmium		**2.00**	
Chromium		**1.00**	
Lead		**3.50**	
Selenium		**-0.433**	
Silver		**-0.548**	
Aluminum	*500000*	*474336*	*95*
Antimony		*6.54*	
Beryllium		*0.0182*	
Boron		*-1.13*	
Calcium	*500000*	*437350*	*87*
Cobalt		*2.87*	
Copper		*2.23*	
Iron	*200000*	*179301*	*90*
Magnesium	*500000*	*465256*	*93*
Manganese		*3.61*	
Molybdenum		*-0.612*	
Nickel		*1.24*	
Potassium		*156*	
Sodium		*-6.30*	
Thallium		*-0.654*	
Tin		*-0.580*	
Titanium		*-5.05*	
Vanadium		*-0.514*	
Zinc		*-5.10*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Lab Sample ID: ICSAB 240-6343/9 Instrument ID: I5

Lab File ID: I50627A ICS Source: MTTRICSABW_00004

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Found Percent Recovery
Arsenic	**1000**	**941**	**94**
Barium	**500**	**514**	**103**
Cadmium	**1000**	**912**	**91**
Chromium	**500**	**477**	**95**
Lead	**1000**	**926**	**93**
Selenium	**1000**	**936**	**94**
Silver	**1000**	**1023**	**102**
Aluminum	*500000*	*473154*	*95*
Antimony	*1000*	*997*	*100*
Beryllium	*500*	*496*	*99*
Boron	*1000*	*1028*	*103*
Calcium	*500000*	*464331*	*93*
Cobalt	*500*	*477*	*95*
Copper	*500*	*512*	*102*
Iron	*200000*	*188640*	*94*
Magnesium	*500000*	*498591*	*100*
Manganese	*500*	*499*	*100*
Molybdenum	*1000*	*954*	*95*
Nickel	*1000*	*921*	*92*
Potassium	*10000*	*10197*	*102*
Sodium	*10000*	*10355*	*104*
Thallium	*1000*	*914*	*91*
Tin	*1000*	*964*	*96*
Titanium	*1000*	*1005*	*100*
Vanadium	*500*	*482*	*96*
Zinc	*1000*	*990*	*99*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MW-206B(053111) MS
Lab ID: 240-759-6 MS
Lab Name: TestAmerica North Canton
Job No.: 240-759-1
SDG No.:
Matrix: Water
Concentration Units: ug/L
% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Silver	50.4		5.0	U	50.0	101	75-125		6010B
Arsenic	1940		10	U	2000	97	75-125		6010B
Barium	2120		90	J	2000	102	75-125		6010B
Cadmium	48.8		2.0	U	50.0	98	75-125		6010B
Chromium	197		5.0	U	200	99	75-125		6010B
Lead	484		3.0	U	500	97	75-125		6010B
Selenium	1970		5.0	U	2000	98	75-125		6010B
Mercury	0.962		0.20	U	1.00	96	69-134		7470A

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - DISSOLVED

Client ID: MW-206B(053111) MSD | Lab ID: 240-759-6 MSD

Lab Name: TestAmerica North Canton | Job No.: 240-759-1

SDG No.:

Matrix: Water | Concentration Units: ug/L

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Silver	53.3		50.0	107	75-125	5	20		6010B
Arsenic	1980		2000	99	75-125	2	20		6010B
Barium	2170		2000	104	75-125	2	20		6010B
Cadmium	49.7		50.0	99	75-125	2	20		6010B
Chromium	201		200	101	75-125	2	20		6010B
Lead	494		500	99	75-125	2	20		6010B
Selenium	2010		2000	100	75-125	2	20		6010B
Mercury	0.992		1.00	99	69-134	3	20		7470A

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-5513/2-A

Lab Name: TestAmerica North Canton Job No.: 240-759-1

Sample Matrix: Water LCS Source: MTAGSPIKEW_00005

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Silver	50.0	52.2		104	80	120		6010B
Arsenic	2000	1900		95	80	120		6010B
Barium	2000	2000		100	80	120		6010B
Cadmium	50.0	48.5		97	80	120		6010B
Chromium	200	195		98	80	120		6010B
Lead	500	479		96	80	120		6010B
Selenium	2000	1940		97	80	120		6010B

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

METHOD REPORTING LIMIT CHECK
METALS

Lab ID: MRL 240-5707/9-A

Lab Name: TestAmerica North Canton Job No.: 240-759-1

Sample Matrix: Water LCS Source: MTHGCALW_00034

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	0.200	0.190	J	95				7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

7A-IN
LAB CONTROL SAMPLE
METALS

Lab ID: LCS 240-5359/2-A

Lab Name: TestAmerica North Canton Job No.: 240-759-1

Sample Matrix: Water LCS Source: MTHGICVW_00053

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Mercury	5.00	5.10		102	81	123		7470A

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica North Canton Job Number: 240-759-1

SDG Number:

Matrix: Water Instrument ID: I5

Method: 6010B MDL Date: 02/08/2010 14:19

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Arsenic	189.042	10	3.2
Barium	493.409	100	0.67
Cadmium	226.502	2	0.66
Chromium	267.716	5	2.2
Lead	220.353	3	1.9
Selenium	196.026	5	4.1
Silver	328.068	5	2.2

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica North Canton Job Number: 240-759-1

SDG Number:

Matrix: Water Instrument ID: I5

Method: 6010B XMDL Date: 02/08/2010 14:19

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Arsenic	189.042	10	3.2
Barium	493.409	100	0.67
Cadmium	226.502	2	0.66
Chromium	267.716	5	2.2
Lead	220.353	3	1.9
Selenium	196.026	5	4.1
Silver	328.068	5	2.2

9-IN
DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica North Canton Job Number: 240-759-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A MDL Date: 02/08/2010 16:06

Prep Method: 7470A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Mercury	253.7	0.2	0.12

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - DISSOLVED

Lab Name: TestAmerica North Canton Job Number: 240-759-1

SDG Number:

Matrix: Water Instrument ID: H1

Method: 7470A XMDL Date: 02/08/2010 16:06

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Mercury	253.7	0.2	0.12

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica North Canton Job Number: 240-759-1

SDG No.:

ICP-AES Instrument ID: I5 Date: 05/11/2011

Analyte	Wave Length	Al	Cr	Cu	Fe	Mn	Mo	Ni	Ti	V					
Aluminum	308.215					0.000266	0.058			0.026359					
Antimony	206.8	-0.00000667	0.0093		0.00002267		-0.0042	-0.00278		-0.00009333					
Arsenic	189.042/2	-0.0031			0.000006		-0.00201								
Beryllium	313.042								-0.00166	0.00033					
Cadmium	226.502/2	0.000007			0.000071			0.000027							
Chromium	267.716						-0.00017			0.000165					
Cobalt	228.616							0.00022							
Copper	324.753						0.000347			-0.0004					
Iron	271.441		0.001539				0.002719			0.012236					
Lead	220.3	-0.00003467		0.00025133	0.00004833	0.00005733	-0.00075	0.000249		-0.00014					
Magnesium	297.078					-0.00193									
Manganese	257.610														
Molybdenum	202.030				-0.00001										
Nickel	231.604/2														
Selenium	196.0	-0.00000267			-0.00021	0.00056933									
Silver	328.068					0.000126									
Thallium	190.864/2	-0.00002	0.000317		-0.00004	0.00052				0.002686					
Titanium	334.941														
Vanadium	292.402				0.000027		-0.00106								
Zinc	213.856/2	0.000011		0.000506	0.000106			0.0055							

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica North Canton Job No: 240-759-1

SDG No.:

Instrument ID: I5 Date: 01/01/2011 09:33

Analyte	Integ. Time (Sec.)	Concentration (ppb)	Method
Silver		2000	6010B
Arsenic		10000	6010B
Barium		25000	6010B
Cadmium		2500	6010B
Chromium		50000	6010B
Lead		15000	6010B
Selenium		10000	6010B

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica North Canton Job No: 240-759-1

SDG No.:

Instrument ID: H1 Date: 04/01/2011 10:45

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Mercury		10	7470A

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-5513/1-A	06/21/2011 12:30	5513		50	50
LCS 240-5513/2-A	06/21/2011 12:30	5513		50	50
240-759-6	06/21/2011 12:30	5513		50	50
240-759-6 MS	06/21/2011 12:30	5513		50	50
240-759-6 MSD	06/21/2011 12:30	5513		50	50
240-759-1	06/21/2011 12:30	5513		50	50
240-759-2	06/21/2011 12:30	5513		50	50
240-759-3	06/21/2011 12:30	5513		50	50
240-759-4	06/21/2011 12:30	5513		50	50
240-759-5	06/21/2011 12:30	5513		50	50

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-5359/1-A	06/20/2011 14:05	5359		100	100
LCS 240-5359/2-A	06/20/2011 14:05	5359		100	100
240-759-6	06/20/2011 14:05	5359		100	100
240-759-6 MS	06/20/2011 14:05	5359		100	100
240-759-6 MSD	06/20/2011 14:05	5359		100	100
240-759-1	06/20/2011 14:05	5359		100	100
240-759-2	06/20/2011 14:05	5359		100	100
240-759-3	06/20/2011 14:05	5359		100	100
240-759-4	06/20/2011 14:05	5359		100	100
240-759-5	06/20/2011 14:05	5359		100	100

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Prep Method: 7470A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MRL 240-5707/9-A	06/22/2011 13:55	5707		100	100

FORM XII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Instrument ID: I5 Method: 6010B

Start Date: 06/27/2011 09:10 End Date: 06/27/2011 13:33

Lab Sample ID	D/F	Type	Time	Analytes																			
				Ag	As	Ba	Cd	Cr	Pb	Se													
STD1 240-6343/1 IC			09:10	X	X	X	X	X	X	X													
CALSTD 240-6343/2 IC			09:15	X	X	X	X	X	X	X													
CALSTD 240-6343/3 IC			09:21	X	X	X	X	X	X	X													
ICV 240-6343/4	1		09:25	X	X	X	X	X	X	X													
ICBIS 240-6343/5	1		09:31	X	X	X	X	X	X	X													
CRI 240-6343/6	1		09:36	X	X	X	X	X	X	X													
ZZZZZZ			09:42																				
ICSA 240-6343/8	1		09:48	X	X	X	X	X	X	X													
ICSAB 240-6343/9	1		09:53	X	X	X	X	X	X	X													
CCV 240-6343/10	1		09:59	X	X	X	X	X	X	X													
CCB 240-6343/11	1		10:05	X	X	X	X	X	X	X													
MB 240-5513/1-A	1	R	10:10	X	X	X	X	X	X	X													
LCS 240-5513/2-A	1	R	10:16	X	X	X	X	X	X	X													
ZZZZZZ			10:22																				
ZZZZZZ			10:27																				
ZZZZZZ			10:33																				
ZZZZZZ			10:39																				
240-759-6	1	D	10:44	X	X	X	X	X	X	X													
240-759-6 MS	1	D	10:50	X	X	X	X	X	X	X													
240-759-6 MSD	1	D	10:56	X	X	X	X	X	X	X													
ZZZZZZ			11:01																				
CCV 240-6343/22	1		11:07	X	X	X	X	X	X	X													
CCB 240-6343/23	1		11:13	X	X	X	X	X	X	X													
ZZZZZZ			11:18																				
ZZZZZZ			11:24																				
ZZZZZZ			11:30																				
ZZZZZZ			11:35																				
ZZZZZZ			11:41																				
ZZZZZZ			11:47																				
ZZZZZZ			11:52																				
ZZZZZZ			12:01																				
240-759-1	1	D	12:07	X	X	X	X	X	X	X													
240-759-2	1	D	12:13	X	X	X	X	X	X	X													
CCV 240-6343/34	1		12:18	X	X	X	X	X	X	X													
CCB 240-6343/35	1		12:24	X	X	X	X	X	X	X													
240-759-3	1	D	12:30	X	X	X	X	X	X	X													
240-759-4	1	D	12:35	X	X	X	X	X	X	X													
240-759-5	1	D	12:41	X	X	X	X	X	X	X													
ZZZZZZ			12:47																				
ZZZZZZ			12:52																				
ZZZZZZ			12:58																				
ZZZZZZ			13:04																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Instrument ID: I5 Method: 6010B

Start Date: 06/27/2011 09:10 End Date: 06/27/2011 13:33

Lab Sample ID	D / F	Type	Time	Analytes																		
				Ag	As	Ba	Cd	Cr	Pb	Se												
ZZZZZZ			13:11																			
ZZZZZZ			13:16																			
ZZZZZZ			13:22																			
CCV 240-6343/46	1		13:28	X	X	X	X	X	X	X												
CCB 240-6343/47	1		13:33	X	X	X	X	X	X	X												

Prep Types

D = Dissolved

R = Total Recoverable

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 06/22/2011 16:46 End Date: 06/22/2011 19:00

Lab Sample ID	D/F	Type	Time	Analytes																			
				Hg																			
IC 240-5707/1-A			16:46	X																			
IC 240-5707/2-A			16:47	X																			
IC 240-5707/3-A			16:49	X																			
IC 240-5707/4-A			16:50	X																			
IC 240-5707/5-A			16:51	X																			
IC 240-5707/6-A			16:52	X																			
ICV 240-5707/7-A	1		16:54	X																			
ICB 240-5707/8-A	1		16:55	X																			
MRL 240-5707/9-A	1	T	16:56	X																			
CCV 240-5707/10-A			16:58																				
CCB 240-5707/12-A			16:59																				
ZZZZZZ			17:00																				
ZZZZZZ			17:01																				
ZZZZZZ			17:03																				
ZZZZZZ			17:04																				
ZZZZZZ			17:05																				
ZZZZZZ			17:07																				
ZZZZZZ			17:08																				
ZZZZZZ			17:09																				
ZZZZZZ			17:10																				
ZZZZZZ			17:12																				
CCV 240-5707/10-A			17:13																				
CCB 240-5707/12-A			17:14																				
ZZZZZZ			17:16																				
ZZZZZZ			17:17																				
ZZZZZZ			17:18																				
ZZZZZZ			17:20																				
ZZZZZZ			17:21																				
ZZZZZZ			17:22																				
ZZZZZZ			17:23																				
ZZZZZZ			17:25																				
ZZZZZZ			17:26																				
ZZZZZZ			17:27																				
CCV 240-5707/10-A	1		17:29	X																			
CCB 240-5707/12-A	1		17:30	X																			
ZZZZZZ			17:31																				
ZZZZZZ			17:33																				
ZZZZZZ			17:34																				
ZZZZZZ			17:35																				
MB 240-5359/1-A	1	T	17:37	X																			
LCS 240-5359/2-A	1	T	17:38	X																			
240-759-6	1	D	17:39	X																			

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 06/22/2011 16:46 End Date: 06/22/2011 19:00

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
240-759-6 MS	1	D	17:40	X																			
240-759-6 MSD	1	D	17:42	X																			
ZZZZZZ			17:43																				
CCV 240-5707/10-A	1		17:44	X																			
CCB 240-5707/12-A	1		17:46	X																			
ZZZZZZ			17:47																				
ZZZZZZ			17:48																				
ZZZZZZ			17:49																				
ZZZZZZ			17:51																				
240-759-1	1	D	17:52	X																			
240-759-2	1	D	17:53	X																			
240-759-3	1	D	17:55	X																			
240-759-4	1	D	17:56	X																			
240-759-5	1	D	17:58	X																			
ZZZZZZ			17:59																				
CCV 240-5707/10-A	1		18:00	X																			
CCB 240-5707/12-A	1		18:02	X																			
ZZZZZZ			18:03																				
ZZZZZZ			18:04																				
ZZZZZZ			18:05																				
ZZZZZZ			18:07																				
ZZZZZZ			18:08																				
ZZZZZZ			18:09																				
ZZZZZZ			18:11																				
ZZZZZZ			18:12																				
ZZZZZZ			18:13																				
ZZZZZZ			18:14																				
CCV 240-5707/10-A			18:16																				
CCB 240-5707/12-A			18:17																				
ZZZZZZ			18:18																				
ZZZZZZ			18:20																				
ZZZZZZ			18:21																				
ZZZZZZ			18:22																				
ZZZZZZ			18:24																				
ZZZZZZ			18:25																				
ZZZZZZ			18:26																				
ZZZZZZ			18:28																				
ZZZZZZ			18:29																				
ZZZZZZ			18:30																				
CCV 240-5707/10-A			18:31																				
CCB 240-5707/12-A			18:33																				
ZZZZZZ			18:34																				

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Instrument ID: H1 Method: 7470A

Start Date: 06/22/2011 16:46 End Date: 06/22/2011 19:00

Lab Sample ID	D / F	Type	Time	Analytes																			
				Hg																			
ZZZZZZ			18:35																				
ZZZZZZ			18:37																				
ZZZZZZ			18:38																				
ZZZZZZ			18:39																				
ZZZZZZ			18:40																				
ZZZZZZ			18:42																				
ZZZZZZ			18:43																				
ZZZZZZ			18:44																				
ZZZZZZ			18:46																				
CCV 240-5707/10-A			18:47																				
CCB 240-5707/12-A			18:48																				
ZZZZZZ			18:49																				
ZZZZZZ			18:51																				
ZZZZZZ			18:52																				
ZZZZZZ			18:53																				
ZZZZZZ			18:55																				
ZZZZZZ			18:56																				
ZZZZZZ			18:57																				
CCV 240-5707/10-A			18:58																				
CCB 240-5707/12-A			19:00																				

Prep Types

D = Dissolved

T = Total/NA

Method: TOTAL Sample Name: STD1-Blank Operator:
Run Time: 06/27/11 09:10 Filename: I50627A
Mode: IR Type: X Corr. Factor: 1.00000
Lab ID.: Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	count	count	count	count	count	count
Avge	.00006	.04619	.09459	.0044	.00084	.00265
SDev	.00133	.00024	.00642	.00005	.00004	.00005
%RSD	2018.69	.52594	6.79598	1.27461	5.46208	1.98518

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	count	count	count	count	count	count
Avge	.00898	-.00319	-.00094	.00171	.01029	.0007
SDev	.00012	.00199	.00028	.00061	.00011	.00033
%RSD	1.39394	62.3661	30.4906	35.8661	1.11938	46.967

Elems	K	Mg	Mn	Mo	Na	Ni
Units	count	count	count	count	count	count
Avge	.01099	.00097	.0007	.00023	.00144	.00097
SDev	.00202	.0008	.00004	.00004	.00099	.00014
%RSD	18.4049	82.774	6.92897	20.3941	68.9176	14.4368

Elems	Sn	Ti	Tl	V	Zn	2203\1
Units	count	count	count	count	count	count
Avge	.00427	.00006	-.01231	.00006	.00497	.01045
SDev	.00253	0	.00168	.00047	0	.00973
%RSD	59.1794	.19507	13.7171	702.457	.19507	93.1094

Elems	2203\2	1960\1	1960\2	2068/2	2068/1	Y_3710
Units	count	count	count	count	count	count
Avge	-.00459	-.01292	.01012	.00033	.00694	5
SDev	.00955	.00221	.00145	.00066	.01181	0
%RSD	207.712	17.1333	14.372	198.178	170.167	0

Elems	*Y
Units	
Avge	14861.7
SDev	28.9914
%RSD	.19507

Method: TOTAL Sample Name: CALSTD Operator:
Run Time: 06/27/11 09:15 Filename: I50627A
Mode: IR Type: X Corr. Factor: 1.00000
Lab ID.: Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	As	B	Ba	Be	Cd
Units	count	count	count	count	count	count
Avge	7.07054	5.49008	2.83248	4.28239	13.7604	28.5319
SDev	.00345	.00554	.00198	.00059	.00844	.00961
%RSD	.04884	.10107	.06994	.01385	.06137	.03368

Elems	Co	Cr	Cu	Mn	Mo	Ni
Units	count	count	count	count	count	count
Avge	4.6492	5.43894	3.03747	13.3554	.9195	2.76636
SDev	.00214	.00273	.00106	.02357	.00576	.00279
%RSD	.04607	.0502	.03498	.17654	.62668	.10101

Elems	Sn	Ti	Tl	V	Zn	2203\1
Units	count	count	count	count	count	count
Avge	11.1148	2.92261	6.08121	4.40387	8.45541	4.29545
SDev	.00117	.00074	.01858	.00358	.00741	.00529
%RSD	.01055	.02533	.30559	.08144	.08769	.12334

Elems	2203\2	1960\1	1960\2	2068/2	2068/1	*Y
Units	count	count	count	count	count	
Avge	5.05033	2.08884	2.42937	.17915	5.28461	15427.8
SDev	.00771	.01695	.01099	.00069	.00611	18.6672
%RSD	.15276	.81152	.45254	.39065	.11579	.12099

Method: TOTAL Sample Name: CAL 2 Operator:
Run Time: 06/27/11 09:21 Filename: I50627A
Mode: IR Type: X Corr. Factor: 1.00000
Lab ID.: Cust. Smpl. ID.: Cust. ID.:

Elems	Al	Ca	Fe	K	Mg	Na
Units	count	count	count	count	count	count
Avge	9.21778	7.51775	4.51655	16.6939	9.64061	.83588
SDev	.00155	.005	.00415	.00169	.00805	.00139
%RSD	.01685	.06661	.09192	.01017	.08353	.16698

Elems	*Y
Units	
Avge	15343
SDev	13.2935
%RSD	.08664

Method: TOTAL Sample Name: ICV Operator: KLC
Run Time: 06/27/11 09:25 Filename: I50627A
Mode: CONC Type: Q Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	499.6	12330.	245.63	1017.	990.7	1017.
SDev	2.768	13.29	4.9157	7.372	2.816	5.054
%RSD	.554	.1078	2.0012	.7247	.2842	.4972

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	24980.	246.4	1005.	1008.	987.2	12750.
SDev	132.2	2.571	7.025	5.939	.348	105
%RSD	.5289	1.043	.6992	.5894	.0352	.8233

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	25020.	24730.	1013.	988.3	24870.	1006.
SDev	123.3	204	4.035	11.4	512.1	11.28
%RSD	.493	.8251	.3985	1.154	2.059	1.121

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	241.04	245.97	239.77	997.1	1011.	489.88
SDev	.99171	.16822	3.8725	12.65	1.787	11.774
%RSD	.41142	.06838	1.6151	1.269	.1768	2.4034

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	989.8	1016.	243.84	247.04	239.64	241.74
SDev	4.174	4.521	.68975	.59656	3.5077	3.2381
%RSD	.4217	.4449	.28287	.24148	1.4638	1.3395

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	240.39	239.46	5.0000	15637.3
SDev	1.747	4.9337	0	118.369
%RSD	.72671	2.0603	0	.75696

Method: TOTAL Sample Name: ICBIS Operator: KLC
Run Time: 06/27/11 09:31 Filename: I50627A
Mode: CONC Type: Q Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.3759	-5.272	1.6086	3.949	.0293	.0160
SDev	.6601	.6091	1.4018	1.732	.0446	.0019
%RSD	175.6	11.55	87.145	43.86	152.3	11.91

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.4432	.0667	.0886	-.2632	.5269	-7.125
SDev	.8851	.0251	.2342	.0651	.5764	5.051
%RSD	199.7	37.6	264.4	24.73	109.4	70.89

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	157.1	6.301	.0110	3.332	-167.4	-1.317
SDev	2.348	7.072	.0131	.984	143.5	.1324
%RSD	1.494	112.2	119.8	29.53	85.74	10.05

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.75903	1.1491	2.6949	-2.046	-.0091	.38342
SDev	1.2638	.21648	1.5774	1.147	.0005	.00705
%RSD	166.5	18.84	58.532	56.07	5.615	1.8405

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.5869	-.1940	.37927	1.5334	-2.4206	.07048
SDev	.2482	.0172	.25201	.45038	.69888	2.2436
%RSD	42.28	8.865	66.448	29.372	28.873	3183.2

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-2.1754	5.1264	5.0000	15476
SDev	.49467	2.1179	0	35.9209
%RSD	22.74	41.314	0	.2321

Method: TOTAL Sample Name: CRI Operator: KLC
Run Time: 06/27/11 09:36 Filename: I50627A
Mode: CONC Type: Q Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5.544	202.2	13.790	194.9	10.14	4.871
SDev	.4504	3.445	.55588	1.205	.0285	.0326
%RSD	8.124	1.704	4.0311	.618	.2814	.6702

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4849.	4.688	5.273	4.632	15.21	276.2
SDev	11.57	.0321	.1974	.1131	.5219	3.562
%RSD	.2387	.6851	3.744	2.441	3.431	1.29

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5119.	4592.	15.02	9.765	4993.	24.42
SDev	16.09	2.205	.0348	.3967	50.64	.2428
%RSD	.3143	.048	.232	4.063	1.014	.9943

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	19.147	9.7702	10.710	91.38	50.09	11.908
SDev	2.1806	.20838	.56466	1.995	.2346	2.3457
%RSD	11.389	2.1328	5.2725	2.183	.4683	19.699

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	6.781	39.80	11.448	8.9324	18.236	19.601
SDev	.3776	.0596	1.8267	1.2244	5.8489	.34915
%RSD	5.568	.1497	15.956	13.707	32.073	1.7813

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	8.1947	11.965	5.0000	14924.4
SDev	2.6263	2.1578	0	21.4963
%RSD	32.049	18.034	0	.14403

Method: TOTAL Sample Name: CRILL Operator: KLC
Run Time: 06/27/11 09:42 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4.271	190.1	10.386	201.2	201.8	5.068
SDev	.0011	.2868	3.103	.9185	.2596	.0031
%RSD	.0253	.1508	29.876	.4564	.1286	.0614

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5021.	2.180	6.953	4.710	25.29	98.31
SDev	8.3	.0518	.017	.0165	.1338	.2909
%RSD	.1653	2.374	.2438	.3494	.529	.2959

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4913.	4906.	15.63	10.89	4988.	40.23
SDev	10.28	9.156	.0163	.2309	98.87	.149
%RSD	.2093	.1866	.1042	2.121	1.982	.3702

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5.6369	3.5333	11.925	99.31	51.01	8.8325
SDev	4.129	.02105	3.4543	.7347	.2968	3.4795
%RSD	73.25	.59587	28.966	.7398	.5818	39.394

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	7.223	19.89	2.7956	3.9017	1.1000	7.9020
SDev	.0616	.1975	1.0368	.48605	3.6795	4.3534
%RSD	.8525	.9926	37.087	12.458	334.51	55.093

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	7.4692	14.150	5.0000	15525.8
SDev	1.0338	5.6951	0	42.7088
%RSD	13.842	40.247	0	.27508

Method: TOTAL Sample Name: ICSA Operator: KLC
Run Time: 06/27/11 09:48 Filename: I50627A
Mode: CONC Type: Q Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.5476	474300.	.89873	-1.128	2.211	.0182
SDev	.0423	834.2	.67296	.3518	.0464	.0001
%RSD	7.719	.1759	74.88	31.18	2.1	.2861

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	437300.	1.999	2.872	1.000	2.230	179300.
SDev	857.1	.1496	.0857	.4011	.0009	254.3
%RSD	.196	7.484	2.984	40.1	.0381	.1418

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	155.7	465300.	3.611	-.6122	-6.300	1.240
SDev	.2068	1330	.0615	.2195	82.12	.2885
%RSD	.1328	.286	1.703	35.86	1303	23.27

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.43300	3.5000	6.5395	-.5805	-5.054	-.65365
SDev	.96649	.10277	.58657	2.826	.0002	1.4582
%RSD	223.21	2.9364	8.9698	486.9	.0048	223.09

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.5144	-5.099	-87.205	48.785	3.0049	-2.1494
SDev	.0385	.2491	3.4302	1.5584	13.847	5.4643
%RSD	7.48	4.886	3.9335	3.1946	460.83	254.23

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-.87948	10.243	5.0000	14186.7
SDev	.82062	.46973	0	.7071
%RSD	93.308	4.5857	0	.00498

Method: TOTAL Sample Name: ICSAB Operator: KLC
Run Time: 06/27/11 09:53 Filename: I50627A
Mode: CONC Type: Q Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1023.	473200.	940.78	1028.	514.3	496.1
SDev	1.06	732	.81146	4.235	.8838	.102
%RSD	.1036	.1547	.08625	.4119	.1718	.0206

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	464300.	912.0	477.3	476.7	512.5	188600.
SDev	82.95	1.069	.0968	.6363	.052	65.58
%RSD	.0179	.1172	.0203	.1335	.0102	.0348

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	10200.	498600.	498.9	954.1	10360.	921.5
SDev	29.3	56.33	.2881	2.861	41.4	.1333
%RSD	.2874	.0113	.0577	.2998	.3998	.0145

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	936.48	925.98	997.35	963.9	1005.	913.76
SDev	2.2744	1.3043	6.5826	1.55	1.627	7.0637
%RSD	.24287	.14085	.66001	.1608	.162	.77303

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	481.7	989.9	865.46	956.20	939.36	935.04
SDev	.2898	.5444	5.3829	4.6428	1.109	2.8563
%RSD	.0602	.055	.62196	.48554	.11806	.30546

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	995.33	998.36	5.0000	14692.1
SDev	4.8851	12.308	0	2.12132
%RSD	.49079	1.2328	0	.01443

Method: TOTAL Sample Name: CCV Operator: KLC
Run Time: 06/27/11 09:59 Filename: I50627A
Mode: CONC Type: Q Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1005.	24710.	483.88	5044.	2021.	2022.
SDev	.7903	27.43	.2922	.4071	1.086	.5949
%RSD	.0786	.111	.06038	.0081	.0538	.0294

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	50230.	488.0	2010.	2001.	1993.	25170.
SDev	83.69	.1602	.9296	1.235	.7766	18.29
%RSD	.1666	.0328	.0462	.0617	.039	.0726

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	50550.	49860.	2061.	1982.	47860.	1992.
SDev	97.42	78.24	.8385	15.96	89.32	4.992
%RSD	.1927	.1569	.0407	.8049	.1866	.2506

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	485.41	490.08	504.39	5057.	5068.	969.59
SDev	2.8949	3.4052	5.3768	1.791	6.611	1.1929
%RSD	.59638	.69481	1.066	.0354	.1305	.12302

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1990.	2027.	485.73	492.25	478.58	488.83
SDev	.9799	2.536	1.0735	4.5692	.91588	3.883
%RSD	.0492	.1252	.22101	.92822	.19137	.79435

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	502.74	505.21	5.0000	15455.6
SDev	2.4851	6.8206	0	66.468
%RSD	.4943	1.35	0	.43005

Method: TOTAL Sample Name: CCB Operator: KLC
Run Time: 06/27/11 10:05 Filename: I50627A
Mode: CONC Type: Q Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.1650	9.213	2.1778	6.240	.2105	.2142
SDev	.1294	4.622	.75157	.1512	.1276	.1196
%RSD	78.39	50.17	34.511	2.423	60.63	55.85

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	12.92	.1473	.2544	-.1911	.3143	-4.623
SDev	6.023	.0828	.3933	.1683	.1287	5.551
%RSD	46.62	56.22	154.6	88.08	40.94	120.1

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	162.7	15.03	.2239	6.567	-167.6	.6921
SDev	.7751	.4624	.123	3.973	158.9	.8583
%RSD	.4764	3.077	54.91	60.51	94.84	124

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.73850	.35003	1.5182	-.0674	.8753	-2.8635
SDev	.94439	.85263	1.7966	2.137	.6249	.52578
%RSD	127.88	243.58	118.34	3170	71.4	18.361

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.4440	1.026	.62009	.21521	-1.2832	1.7478
SDev	.2112	.0287	.19532	1.3758	4.7347	.9479
%RSD	47.56	2.794	31.5	639.28	368.98	54.233

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	1.4257	1.5644	5.0000	15473
SDev	1.4776	1.9558	0	7.35418
%RSD	103.64	125.02	0	.04752

Method: TOTAL Sample Name: mb 240-5513/1-a Operator: KLC
Run Time: 06/27/11 10:10 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.7177	10.81	1.1606	4.606	.1188	.1790
SDev	.131	1.803	.15958	1.759	.1289	.051
%RSD	18.25	16.68	13.751	38.2	108.5	28.46

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	47.15	.0640	.6953	-.1564	.1203	-9.674
SDev	3.762	.0061	.1629	.1694	.1345	1.567
%RSD	7.978	9.54	23.44	108.3	111.8	16.2

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	159.7	13.79	.3585	1.445	-405.0	.8590
SDev	.4189	2.358	.0686	.196	49.12	.1962
%RSD	.2623	17.1	19.12	13.56	12.13	22.84

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.33165	-.45903	-.99886	-.9943	.6840	.20202
SDev	.04337	.60255	.13712	1.052	.0035	1.2627
%RSD	13.078	131.27	13.728	105.8	.5139	625.02

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.4245	3.048	-1.0579	-.16003	4.3621	-2.6750
SDev	.3412	.0906	.86486	.47159	.29961	.08455
%RSD	80.38	2.974	81.751	294.68	6.8687	3.161

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-1.8406	-.57861	5.0000	14971.3
SDev	1.0444	.31581	0	57.5581
%RSD	56.739	54.581	0	.38445

Method: TOTAL Sample Name: lcs 240-5513/2-a Operator: KLC
Run Time: 06/27/11 10:16 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	52.21	1923.	1895.9	999.9	1995.	50.81
SDev	.4303	2.585	.28441	3.201	2.441	.0216
%RSD	.8243	.1344	.015	.3201	.1224	.0426

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	50130.	48.50	487.0	195.4	246.0	1003.
SDev	2.304	.0335	.0562	.2839	.186	2.116
%RSD	.0046	.0691	.0115	.1453	.0756	.2109

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	49290.	49680.	512.1	945.1	49650.	481.2
SDev	1.53	10.08	.1856	8.433	38.73	2.398
%RSD	.0031	.0203	.0362	.8923	.078	.4983

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1939.3	479.29	477.89	1944.	972.6	1905.2
SDev	3.0954	1.3116	6.2168	4.703	1.055	1.9691
%RSD	.15961	.27364	1.3009	.242	.1084	.10335

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	488.9	505.3	472.86	482.51	1928.3	1944.8
SDev	.2041	.8212	2.9964	.47042	1.9325	5.6056
%RSD	.0417	.1625	.63368	.09749	.10022	.28823

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	479.95	476.87	5.0000	15467.1
SDev	4.8125	6.9179	0	14.2837
%RSD	1.0027	1.4507	0	.09234

Method: TOTAL Sample Name: 240-697-u-3-a Operator: KLC
Run Time: 06/27/11 10:22 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0866	14.05	.33248	93.79	111.8	.0141
SDev	.1229	.9871	1.2414	1.17	.2141	.0038
%RSD	141.9	7.027	373.38	1.247	.1914	27.08

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	166900.	.0925	.3427	.5387	.2284	-13.47
SDev	252.9	.0172	.0807	.2038	.0656	3.698
%RSD	.1515	18.58	23.55	37.83	28.73	27.46

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	588.8	39750.	6.263	3.859	93480.	1.194
SDev	7.758	69.22	.0002	1.486	24.26	.475
%RSD	1.318	.1742	.003	38.51	.026	39.8

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.41385	-.16071	-1.9207	-.7856	-2.207	-1.1685
SDev	.20721	.64977	1.4119	1.312	.1556	.42195
%RSD	50.068	404.31	73.513	167	7.051	36.111

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.0881	2.220	-.92717	.22194	1.6166	-.18661
SDev	.1295	.0687	1.1599	1.5533	.8914	.75569
%RSD	146.9	3.094	125.11	699.86	55.14	404.95

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-2.5727	-1.5951	5.0000	14710
SDev	1.0492	1.593	0	65.9025
%RSD	40.784	99.867	0	.44801

Method: TOTAL Sample Name: SD 240-697-u-3-a@5 Operator: KLC
Run Time: 06/27/11 10:27 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.7333	50.75	-1.4674	26.79	22.30	.0184
SDev	.391	4.277	1.3979	.6951	.0771	.0133
%RSD	53.32	8.428	95.27	2.595	.3457	72.57

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	34260.	-.0989	-.0581	-.3952	-.0817	-10.06
SDev	8.168	.1335	.1636	.805	.4965	1.054
%RSD	.0238	135	281.8	203.7	607.7	10.48

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	234.0	7938.	1.260	.7328	18640.	-.2427
SDev	15.98	11.22	.0563	.4152	15.32	.8257
%RSD	6.83	.1414	4.464	56.66	.0822	340.3

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.0830	.60357	1.1684	-2.727	-.9213	-1.3268
SDev	1.1269	.14724	2.8898	.6421	.0004	.67436
%RSD	104.06	24.396	247.33	23.55	.0386	50.826

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0312	.7085	1.1118	.34985	.65497	1.2967
SDev	.1291	.0841	.68421	.12083	1.2461	1.0674
%RSD	414.1	11.88	61.542	34.539	190.25	82.322

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-.72867	2.1155	5.0000	14853.2
SDev	.51542	4.0752	0	7.6373
%RSD	70.735	192.64	0	.05141

Method: TOTAL Sample Name: 240-697-u-3-b ms Operator: KLC
Run Time: 06/27/11 10:33 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	52.73	2046.	1898.0	1114.	2243.	49.89
SDev	.1566	6.273	6.6542	3.281	2.092	.0172
%RSD	.2969	.3066	.35058	.2944	.0933	.0344

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	207400.	46.42	478.0	193.5	261.8	983.7
SDev	98.41	.0454	.5097	.4805	.6826	.4664
%RSD	.0475	.0979	.1066	.2483	.2607	.0474

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	55130.	86050.	520.0	945.7	142800.	470.5
SDev	135.3	52.18	.4872	8.606	451.1	3.066
%RSD	.2454	.0606	.0937	.91	.3159	.6517

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1930.6	465.31	485.76	1890.	1001.	1870.5
SDev	9.8628	1.6797	2.5546	.4206	.1334	4.7321
%RSD	.51087	.36099	.52589	.0223	.0133	.25298

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	495.6	505.2	456.77	469.57	1916.1	1937.8
SDev	.0309	.9146	2.3281	1.356	12.942	8.3257
%RSD	.0062	.181	.50969	.28878	.67541	.42965

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	491.37	482.96	5.0000	14597.1
SDev	2.5286	2.5675	0	9.19238
%RSD	.5146	.53162	0	.06297

Method: TOTAL Sample Name: 240-697-u-3-c msd Operator: KLC
Run Time: 06/27/11 10:39 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	53.08	2036.	1992.5	1139.	2209.	52.64
SDev	.7669	.8485	.94223	3.386	.9502	.0954
%RSD	1.445	.0417	.04728	.2973	.043	.1813

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	220300.	49.92	503.7	202.2	258.8	1156.
SDev	340.3	.0433	.147	.6138	.9238	4.837
%RSD	.1544	.0867	.0292	.3035	.357	.4183

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	52650.	92470.	542.6	983.7	140600.	495.6
SDev	67.65	86.16	.5772	4.72	109.5	.3108
%RSD	.1285	.0932	.1064	.4798	.0778	.0627

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2025.8	498.20	501.13	2018.	1014.	1972.4
SDev	1.7323	.04233	.31924	1.001	1.858	7.4251
%RSD	.08551	.00849	.0637	.0496	.1833	.37644

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	508.7	527.3	489.88	502.35	2004.2	2036.5
SDev	.1109	.109	4.6045	2.2353	4.0724	4.6304
%RSD	.0218	.0207	.93992	.44497	.20319	.22736

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	503.48	499.96	5.0000	15339.9
SDev	.82315	.06767	0	23.3345
%RSD	.16349	.01353	0	.15211

Method: TOTAL Sample Name: 240-759-e-6-a Operator: KLC
Run Time: 06/27/11 10:44 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.4565	11.05	.67084	318.3	89.73	.0250
SDev	.1608	1.991	.49163	.4433	.2476	.0009
%RSD	35.22	18.02	73.285	.1393	.2759	3.658

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	99450.	.0489	.7512	.3454	.5997	-11.18
SDev	188.6	.033	.0817	.0373	.6438	2.619
%RSD	.1896	67.5	10.88	10.79	107.4	23.43

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3095.	28880.	5.131	5.262	77660.	7.967
SDev	19.47	21.38	.0206	2.281	274.6	.195
%RSD	.629	.074	.4007	43.36	.3536	2.448

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.63306	.45260	3.0348	-3.213	-1.839	1.5905
SDev	1.5992	.7524	.77589	.1275	.0019	.20721
%RSD	252.62	166.24	25.567	3.969	.1039	13.028

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.1165	2.193	-1.3513	1.3532	1.6045	-1.7502
SDev	.0885	.0964	1.4646	1.8592	6.6229	.90883
%RSD	75.98	4.396	108.38	137.39	412.78	51.929

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	.79454	4.1532	5.0000	14883.7
SDev	1.6	1.9621	0	17.6777
%RSD	201.37	47.242	0	.11877

Method: TOTAL Sample Name: 240-759-e-6-b ms Operator: KLC
Run Time: 06/27/11 10:50 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	50.43	1958.	1941.3	1341.	2121.	51.49
SDev	.0047	.8954	6.962	3.495	6.169	.0797
%RSD	.0094	.0457	.35862	.2606	.2908	.1548

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	151900.	48.85	492.1	197.4	250.5	1007.
SDev	350.6	.0719	1.26	.5867	1.09	1.861
%RSD	.2308	.1473	.2561	.2972	.4353	.1848

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	52280.	79540.	527.6	954.3	125100.	490.2
SDev	233.5	146.4	1.053	9.27	381.7	1.407
%RSD	.4467	.184	.1997	.9714	.3052	.287

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1966.1	483.81	486.20	1973.	983.4	1908.3
SDev	2.7266	.01411	2.4647	2.813	2.498	10.178
%RSD	.13868	.00291	.50693	.1426	.254	.53333

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	494.0	513.1	475.98	487.72	1940.8	1978.7
SDev	.4549	1.561	2.6069	1.2803	3.5954	2.2929
%RSD	.0921	.3041	.54769	.26251	.18525	.11588

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	491.17	483.72	5.0000	15481.8
SDev	1.5664	2.9132	0	17.253
%RSD	.3189	.60226	0	.11144

Method: TOTAL Sample Name: 240-759-e-6-c msd Operator: KLC
Run Time: 06/27/11 10:56 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	53.26	2004.	1978.1	1374.	2169.	52.48
SDev	.7569	2.099	.25161	1.452	.3577	.0406
%RSD	1.421	.1047	.01271	.1057	.0165	.0774

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	156800.	49.72	500.9	201.1	256.1	1029.
SDev	107.8	.0827	.148	.2704	.294	5.117
%RSD	.0688	.1664	.0295	.1345	.1148	.497

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	54270.	82280.	538.5	976.0	129300.	498.3
SDev	57.05	87.11	.189	7.237	15.55	3.726
%RSD	.1051	.1059	.0351	.7414	.012	.7477

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2006.5	494.49	497.64	2007.	1003.	1940.6
SDev	7.7754	.89027	1.1599	4.477	.7181	3.7786
%RSD	.38751	.18003	.23308	.2231	.0716	.19471

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	503.3	522.1	486.77	498.35	1982.1	2018.6
SDev	.5093	.1798	2.0896	.29149	13.772	4.7815
%RSD	.1012	.0344	.42928	.05849	.6948	.23687

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	502.87	495.03	5.0000	15384.5
SDev	.44703	1.9622	0	59.2554
%RSD	.08889	.39638	0	.38516

Method: TOTAL Sample Name: 240-697-i-1-a Operator: KLC
Run Time: 06/27/11 11:01 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-3.933	330.2	-.39287	97.33	25.04	.0955
SDev	5.616	83.54	3.2724	1.438	.031	.0019
%RSD	142.8	25.3	832.93	1.477	.124	1.999

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	140400.	-.9041	-2.354	-7.111	.7733	513.8
SDev	826.2	1.167	3.898	10.96	.0319	8.561
%RSD	.5884	129.1	165.6	154.1	4.126	1.666

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	577.7	43180.	7.285	4.276	810.5	-1.894
SDev	314.6	145.5	.0312	1.676	3962	4.838
%RSD	54.46	.337	.428	39.19	488.8	255.4

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.90395	.81026	7.0803	-.9895	2.545	-.48898
SDev	1.5694	.35343	8.1181	.5097	.0063	.30354
%RSD	173.61	43.62	114.66	51.51	.246	62.077

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.6348	6.625	-16.217	9.3111	-20.090	8.6744
SDev	.1332	.0536	20.37	10.699	22.307	13.489
%RSD	20.99	.8085	125.61	114.91	111.04	155.51

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-8.8614	15.039	5.0000	14796.2
SDev	11.009	17.667	0	33.3749
%RSD	124.23	117.47	0	.22556

Method: TOTAL Sample Name: CCV Operator: KLC
Run Time: 06/27/11 11:07 Filename: I50627A
Mode: CONC Type: Q Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1001.	24940.	456.57	4904.	2066.	1913.
SDev	4.412	88.18	.66541	39.33	9.035	6.032
%RSD	.4408	.3535	.14574	.8019	.4374	.3153

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	47250.	452.7	1891.	1906.	2011.	23720.
SDev	145.1	1.623	5.093	7.369	8.028	85.55
%RSD	.3071	.3585	.2694	.3867	.3992	.3606

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	52970.	46200.	1999.	1892.	48710.	1883.
SDev	131.5	144.1	8.327	22.95	207.4	9.088
%RSD	.2482	.3119	.4166	1.213	.4258	.4827

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	457.34	456.94	480.04	4714.	4979.	919.45
SDev	2.3422	.37906	.5499	17.19	19.89	11.622
%RSD	.51213	.08295	.11455	.3646	.3995	1.2641

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1928.	1936.	445.45	462.67	446.30	462.85
SDev	8.106	6.238	.79862	.16956	.3173	3.67
%RSD	.4205	.3223	.17928	.03664	.07109	.7929

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	485.02	477.56	5.0000	14740.4
SDev	.1681	.74051	0	40.7291
%RSD	.03465	.15506	0	.2763

Method: TOTAL Sample Name: CCB Operator: KLC
Run Time: 06/27/11 11:13 Filename: I50627A
Mode: CONC Type: Q Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.6230	13.19	-.31625	3.835	.1960	.2823
SDev	.0399	3.122	.75547	.3122	.133	.1521
%RSD	6.402	23.66	238.88	8.142	67.87	53.87

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3.172	.0058	.0815	-.1888	-.1671	-5.594
SDev	3.661	.1716	.1247	.5987	.3606	9.542
%RSD	115.4	2951	153	317.1	215.8	170.6

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	161.9	8.871	.3061	6.349	-217.2	-.1363
SDev	8.629	10.92	.1859	2.911	83.21	.2756
%RSD	5.33	123.1	60.73	45.84	38.32	202.2

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.41792	.66099	.84873	-.9200	1.045	1.4804
SDev	.34018	.79316	1.1149	1.981	.4904	.4878
%RSD	81.4	119.99	131.36	215.3	46.91	32.95

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.3145	1.133	.21413	.88409	2.1190	-.43134
SDev	.0893	.0609	.29643	1.3371	1.9275	1.4723
%RSD	28.41	5.375	138.43	151.24	90.964	341.34

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-1.0428	1.7931	5.0000	14748.8
SDev	3.2011	.07334	0	20.3645
%RSD	306.99	4.0905	0	.13807

Method: TOTAL Sample Name: 240-697-i-2-a Operator: KLC
Run Time: 06/27/11 11:18 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.5458	37.98	3.7727	140.0	734.5	.1032
SDev	.4798	2.657	.60114	1.199	1.067	.0672
%RSD	87.92	6.996	15.934	.8566	.1453	65.15

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	86380.	.1283	-.3055	1.611	-.9798	3000.
SDev	123.1	.0197	.2373	.6398	.419	4.843
%RSD	.1425	15.36	77.68	39.7	42.76	.1614

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1881.	56350.	33.81	44.44	139000.	1.309
SDev	13.49	79.49	.1102	.3804	556.7	.6644
%RSD	.717	.1411	.326	.856	.4005	50.74

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.9617	.71299	-.62157	-2.155	-.3411	1.0177
SDev	.43056	.68371	.13207	.4134	.1569	1.0456
%RSD	21.948	95.894	21.249	19.18	45.98	102.74

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.4177	2.277	-.01746	1.0777	-1.0383	-2.4228
SDev	.5413	.0428	.43873	.80602	4.3348	1.5186
%RSD	129.6	1.878	2512.2	74.793	417.5	62.681

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-1.1805	-.34252	5.0000	15420.3
SDev	.50752	.05536	0	6.36396
%RSD	42.992	16.163	0	.04127

Method: TOTAL Sample Name: 240-697-i-4-a Operator: KLC
Run Time: 06/27/11 11:24 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.6297	37.86	6.2361	184.4	299.5	.0438
SDev	.6998	1.009	1.6563	2.423	.7066	.0126
%RSD	111.1	2.664	26.561	1.314	.236	28.88

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	106400.	.1948	.7544	.2249	-1.033	1160.
SDev	156.4	.0271	.1578	.2031	.1311	2.946
%RSD	.147	13.94	20.91	90.28	12.69	.2541

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1824.	35110.	340.9	1.380	82100.	2.662
SDev	7.093	46.16	.7619	.5955	235.6	.9961
%RSD	.3889	.1315	.2235	43.15	.2869	37.43

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-2.5643	.64184	1.4280	-2.683	-1.116	-1.5953
SDev	2.8909	.90145	1.8949	.7423	.0007	2.2489
%RSD	112.74	140.45	132.7	27.67	.0625	140.97

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.0908	2.084	.21516	.85486	-3.9585	-1.8683
SDev	.0823	.133	.37488	1.1643	6.8631	.9078
%RSD	90.66	6.382	174.23	136.2	173.38	48.589

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-2.2453	3.2619	5.0000	15451
SDev	.51331	2.5847	0	12.1624
%RSD	22.861	79.239	0	.07871

Method: TOTAL Sample Name: 240-697-u-5-a Operator: KLC
Run Time: 06/27/11 11:30 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.7543	24.07	1.5452	163.5	150.4	.0917
SDev	.0761	1.809	.27796	.2391	.2618	.0149
%RSD	10.09	7.517	17.988	.1463	.1741	16.26

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	94670.	.1258	.8106	.3212	-1.147	159.1
SDev	121.9	.0936	.312	.1022	.2565	2.795
%RSD	.1288	74.41	38.49	31.82	22.37	1.757

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	826.9	32110.	221.0	4.977	56510.	1.697
SDev	.1747	30.45	.3123	.6001	247.9	.7258
%RSD	.0211	.0948	.1413	12.06	.4387	42.76

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.6611	.14586	-.98510	-2.924	-1.437	-2.0501
SDev	2.7689	.14569	.56186	.3253	.4639	1.3435
%RSD	166.69	99.885	57.036	11.12	32.28	65.535

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.1765	1.650	-1.7992	1.1169	2.7109	1.1370
SDev	.4944	.0632	.66743	.11477	4.8291	1.7404
%RSD	280.2	3.829	37.096	10.276	178.13	153.07

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-2.8765	-.04082	5.0000	15591.3
SDev	.49695	.59427	0	21.0716
%RSD	17.276	1455.5	0	.13515

Method: TOTAL Sample Name: 240-697-i-6-a Operator: KLC
Run Time: 06/27/11 11:35 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.5549	27.20	1.1146	33.36	360.1	.0761
SDev	.0151	.7428	1.1308	.3473	1.661	.0299
%RSD	2.728	2.731	101.46	1.041	.4613	39.25

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	152900.	.4511	.6971	.1998	-.6494	13.82
SDev	725.4	.1416	.159	.2994	.2312	.0798
%RSD	.4746	31.39	22.81	149.8	35.6	.5777

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	20760.	47510.	669.5	1.953	254100.	5.562
SDev	56.76	246	3.2	.6125	727.4	.426
%RSD	.2734	.5177	.4779	31.37	.2862	7.659

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.25332	.14399	.32849	-2.353	-2.013	-1.7048
SDev	1.7087	.26849	1.6707	.13	.0067	1.2097
%RSD	674.51	186.45	508.6	5.526	.3337	70.958

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.4439	2.080	-.63961	.53521	2.7449	-.99058
SDev	.041	.2118	2.2312	1.5165	.8656	2.1296
%RSD	9.236	10.19	348.83	283.34	31.535	214.98

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-.75488	.86937	5.0000	15351.1
SDev	1.5388	1.7366	0	57.8412
%RSD	203.85	199.75	0	.37678

Method: TOTAL Sample Name: 240-697-i-7-a Operator: KLC
Run Time: 06/27/11 11:41 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.3852	361.9	22.888	78.67	287.3	.1158
SDev	.4198	1.837	.12948	.1918	.504	.0147
%RSD	109	.5076	.56573	.2438	.1754	12.66

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	229900.	.0883	2.617	1.017	.4462	14050.
SDev	318.4	.0494	.2371	.0376	.2655	22.42
%RSD	.1385	55.99	9.059	3.699	59.49	.1595

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1250.	83320.	2315.	15.83	232800.	5.047
SDev	10.16	56.18	3.326	1.035	635	.1437
%RSD	.8131	.0674	.1437	6.535	.2727	2.846

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-2.6587	.28086	-.48261	-1.603	.8931	-1.4661
SDev	.86151	.53643	1.906	.9161	.0016	.55929
%RSD	32.404	191	394.93	57.15	.1822	38.149

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.5051	7.791	-1.5908	1.2153	-.35112	-3.8107
SDev	.2125	.0969	.47673	.56624	3.0471	.22965
%RSD	42.06	1.244	29.968	46.592	867.82	6.0267

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-2.9768	.76262	5.0000	15230.4
SDev	.00819	2.8616	0	22.0619
%RSD	.27517	375.23	0	.14485

Method: TOTAL Sample Name: 240-697-i-8-a Operator: KLC
Run Time: 06/27/11 11:47 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.3148	63.32	.90623	115.8	68.79	.0946
SDev	.5448	.6837	.5475	.1361	.0266	.0027
%RSD	173.1	1.08	60.416	.1175	.0386	2.813

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	140800.	1.301	1.277	.2670	-.4015	437.4
SDev	169.3	.0676	.5775	.6674	.725	6.709
%RSD	.1203	5.198	45.22	250	180.5	1.534

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2103.	57350.	206.4	3.121	65920.	3.357
SDev	18.36	31.26	.0409	.43	230.6	.7512
%RSD	.8731	.0545	.0198	13.78	.3499	22.38

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.80916	-.42631	1.6003	-3.176	-1.161	1.3760
SDev	.36604	.64877	.99331	.5172	.0026	2.3773
%RSD	45.237	152.18	62.072	16.29	.2281	172.77

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.1940	4.394	-2.2880	.50314	1.1874	-1.8059
SDev	.6103	.1127	1.6645	.14165	1.184	1.1399
%RSD	314.6	2.565	72.75	28.154	99.716	63.119

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-2.9681	3.8810	5.0000	14710.6
SDev	.53697	1.2211	0	41.8608
%RSD	18.092	31.465	0	.28456

Method: TOTAL Sample Name: 240-697-i-9-a Operator: KLC
Run Time: 06/27/11 11:52 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.5656	29.66	10.812	200.7	202.8	.1294
SDev	.0915	4.087	.18276	.8784	.1644	.011
%RSD	16.17	13.78	1.6904	.4377	.0811	8.476

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	95630.	-.0169	1.005	.1604	-.8857	5862.
SDev	98.53	.0844	.4297	.062	.1974	4.13
%RSD	.103	500.2	42.77	38.62	22.29	.0705

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	10560.	32760.	662.9	2.666	86640.	.1698
SDev	16.06	38.96	.2697	1.197	149.9	1.712
%RSD	.1521	.1189	.0407	44.9	.1731	1008

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-2.2433	.73911	.21219	-2.779	-1.439	.49408
SDev	.77538	.97636	.10021	.3712	.4698	.7619
%RSD	34.564	132.1	47.226	13.36	32.66	154.2

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.4180	54.14	-.17446	1.1952	-1.2727	-2.7280
SDev	.2063	.074	1.3102	2.118	2.6374	2.4792
%RSD	49.36	.1367	751.01	177.2	207.24	90.882

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-2.0578	1.3455	5.0000	15583.2
SDev	.01228	.15637	0	52.3259
%RSD	.59698	11.622	0	.33578

Method: TOTAL Sample Name: 240-697-i-10-a Operator: KLC
Run Time: 06/27/11 12:01 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.2073	40.29	.29489	227.2	84.21	.0639
SDev	.5017	1.739	.12041	.425	.1937	.0141
%RSD	242	4.318	40.832	.1871	.23	22.13

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	41180.	.1665	.8098	1.283	1.886	52.56
SDev	17.2	.0025	.4951	.2811	.1321	.5508
%RSD	.0418	1.487	61.13	21.92	7.004	1.048

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3312.	14710.	809.4	7.970	224600.	3.932
SDev	15.66	22.62	.0718	.2117	212.4	1.319
%RSD	.4729	.1538	.0089	2.656	.0946	33.55

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-2.8999	-.17060	.19449	-3.329	-.2302	.04256
SDev	1.6795	1.5621	2.8232	.9059	0	5.1016
%RSD	57.915	915.65	1451.6	27.21	0	11987

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.3146	25.56	-2.1224	.80381	-3.3339	-2.6832
SDev	.0873	.0254	.15592	2.4198	6.1982	.57651
%RSD	27.75	.0993	7.3467	301.04	185.91	21.486

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-2.1603	1.3701	5.0000	14755.7
SDev	.53333	3.9664	0	5.23286
%RSD	24.688	289.5	0	.03546

Method: TOTAL Sample Name: 240-759-b-1-b Operator: KLC
Run Time: 06/27/11 12:07 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.4848	12.19	.07005	150.3	30.24	.0360
SDev	.8934	.1323	2	.8363	.0403	.0033
%RSD	184.3	1.085	2854.7	.5563	.1335	9.056

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	88270.	.1527	.5590	1.483	.1924	-5.312
SDev	163.7	.1018	.0381	.1797	.1775	4.581
%RSD	.1855	66.68	6.815	12.12	92.25	86.24

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1822.	19880.	.4875	4.617	29180.	3.048
SDev	7.942	38.94	.1071	.7752	25.62	1.544
%RSD	.4359	.1959	21.96	16.79	.0878	50.65

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.76192	-.35321	-.70504	-2.186	-1.118	.93519
SDev	.66732	.06214	.3649	.7775	.0036	1.771
%RSD	87.584	17.595	51.756	35.57	.3226	189.37

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0908	3.697	-2.4678	.70248	1.4221	.43234
SDev	.0413	.2777	1.9382	1.0608	3.8534	2.9243
%RSD	45.45	7.512	78.539	151.01	270.97	676.38

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-2.1739	.02828	5.0000	15419.1
SDev	1.5091	.20634	0	62.6501
%RSD	69.42	729.55	0	.40631

Method: TOTAL Sample Name: 240-759-b-2-b Operator: KLC
Run Time: 06/27/11 12:13 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.127	10.35	1.7726	156.0	31.59	.0351
SDev	.2653	6.042	.91199	.5667	.1131	.0216
%RSD	23.55	58.38	51.449	.3633	.3581	61.49

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	91130.	.1376	.0012	1.526	.6049	-20.37
SDev	148.8	.0537	.4385	.0513	.5703	1.438
%RSD	.1632	39.02	35790	3.362	94.29	7.057

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1872.	20540.	.6227	3.211	30510.	.3703
SDev	10.57	50.16	.0051	2.816	63.87	.4084
%RSD	.5647	.2442	.8208	87.7	.2094	110.3

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.4930	.03878	1.3534	-2.916	-1.117	-2.4247
SDev	2.004	.23321	.59951	.3241	.0054	1.3682
%RSD	134.22	601.24	44.295	11.11	.4872	56.427

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.2929	2.101	-1.4676	.79084	-3.1555	3.8138
SDev	.0816	.0685	.98472	.84127	.34115	2.8342
%RSD	27.86	3.258	67.099	106.38	10.812	74.314

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-1.4702	2.7631	5.0000	15438.4
SDev	1.5478	.12606	0	94.7523
%RSD	105.28	4.5625	0	.61374

Method: TOTAL Sample Name: CCV Operator: KLC
Run Time: 06/27/11 12:18 Filename: I50627A
Mode: CONC Type: Q Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	997.3	24520.	474.61	4863.	2002.	1992.
SDev	4.376	117.9	1.4985	52.42	9.333	7.779
%RSD	.4388	.4807	.31574	1.078	.4661	.3905

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	49170.	480.4	1962.	1966.	1967.	24480.
SDev	183	1.407	6.465	7.743	11.74	99.8
%RSD	.372	.293	.3295	.3938	.5971	.4077

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	50060.	48860.	2069.	1934.	47030.	1968.
SDev	335.9	216	10.29	23.94	449.3	7.16
%RSD	.6711	.4422	.4975	1.238	.9553	.3638

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	475.10	478.72	485.54	4966.	4949.	938.09
SDev	.71912	1.5837	1.7412	17.5	23.13	8.2503
%RSD	.15136	.33082	.35861	.3524	.4674	.87947

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1948.	1995.	472.34	481.90	462.86	481.22
SDev	9.422	5.686	2.7559	3.7503	3.3826	.61064
%RSD	.4836	.285	.58345	.77822	.73081	.12689

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	494.68	480.98	5.0000	15432.5
SDev	2.6983	1.2634	0	20.7892
%RSD	.54547	.26266	0	.13471

Method: TOTAL Sample Name: CCB Operator: KLC
Run Time: 06/27/11 12:24 Filename: I50627A
Mode: CONC Type: Q Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.5317	14.86	.79073	4.106	.1519	.2440
SDev	.052	.4279	.1211	1.626	.2142	.0021
%RSD	9.781	2.88	15.316	39.6	141	.8546

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3.681	-.0445	.4487	.1205	-1.114	-2.823
SDev	.044	.0595	.0396	.136	.4869	.9994
%RSD	1.196	133.6	8.828	112.9	43.72	35.4

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	164.1	12.05	.1763	5.878	-172.8	-.2871
SDev	1.493	.9578	.0001	4.585	71.62	.3977
%RSD	.9099	7.947	.0751	77.99	41.44	138.5

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.59321	.41890	-.83264	-1.517	.7669	-1.5712
SDev	1.8561	.31586	.2215	.9898	1.097	.32061
%RSD	312.89	75.403	26.602	65.27	143	20.406

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.5030	.9766	1.2732	-.00759	-.12097	-.82898
SDev	.2958	.1949	.47414	.71027	5.3052	.13422
%RSD	58.81	19.95	37.241	9355.3	4385.5	16.191

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-3.2263	.36238	5.0000	15444.3
SDev	4.0905	1.7101	0	5.51529
%RSD	126.79	471.89	0	.03571

Method: TOTAL Sample Name: 240-759-b-3-b Operator: KLC
Run Time: 06/27/11 12:30 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.5170	7.188	2.2687	112.8	35.02	.1091
SDev	.146	3.682	1.2205	3.931	.8477	.0036
%RSD	28.24	51.22	53.796	3.485	2.421	3.325

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	27240.	.0048	.4227	2.560	-.6194	14.26
SDev	596.2	.0093	.1601	.1076	.2579	3.269
%RSD	2.189	195.9	37.87	4.205	41.63	22.93

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	4573.	8162.	1.760	70.61	43980.	10.25
SDev	98.09	181.2	.006	2.143	1218	1.694
%RSD	2.145	2.221	.3381	3.036	2.769	16.53

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.2377	-.05633	-.69627	-1.175	-.2302	.05654
SDev	.4439	.74977	.62374	.5002	0	1.4021
%RSD	35.864	1331	89.583	42.56	0	2479.7

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.2445	5.288	-.63847	.23430	-.10152	-1.8050
SDev	.1592	.1811	1.5274	1.8866	.0836	.62377
%RSD	65.12	3.424	239.22	805.2	82.35	34.558

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-.81153	-.63873	5.0000	15644.6
SDev	.52386	1.1967	0	167.443
%RSD	64.552	187.35	0	1.07029

Method: TOTAL Sample Name: 240-759-b-4-b Operator: KLC
Run Time: 06/27/11 12:35 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.3489	9.946	4.5045	176.5	10.67	.0926
SDev	.2329	3.139	.6094	.2377	.0238	.0291
%RSD	66.75	31.56	13.529	.1347	.2235	31.41

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	39900.	.1103	.3926	1.110	-.6422	-10.51
SDev	61.34	.077	.512	.1734	.3967	1.527
%RSD	.1537	69.83	130.4	15.61	61.77	14.53

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	5766.	12370.	1.304	61.06	76230.	.6996
SDev	9.891	20.06	.0032	1.068	236.5	.0707
%RSD	.1715	.1622	.2427	1.749	.3103	10.11

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.66589	-.26862	.00340	-.7249	-.7845	-3.1127
SDev	.24307	1.0589	1.0477	.1303	.4696	2.3188
%RSD	36.503	394.21	30791	17.98	59.86	74.493

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.9160	3.896	-.62188	-.09226	1.6467	-1.8205
SDev	.1256	.1441	.61626	1.8953	1.2155	.24239
%RSD	13.71	3.699	99.097	2054.3	73.812	13.315

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	.18244	-.08598	5.0000	15419.7
SDev	1.0043	1.0694	0	32.1029
%RSD	550.45	1243.7	0	.20819

Method: TOTAL Sample Name: 240-759-b-5-b Operator: KLC
Run Time: 06/27/11 12:41 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.4943	10.36	.86305	2.816	-.0609	.0912
SDev	.0269	3.037	1.0489	.201	.087	.0019
%RSD	5.44	29.31	121.53	7.136	142.7	2.126

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	50.83	.0544	.5879	-.1445	-.4491	-2.086
SDev	1.582	.115	.3153	.3674	.2695	3.052
%RSD	3.112	211.4	53.63	254.2	60	146.3

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	161.4	11.35	.3499	.3819	-274.4	.1794
SDev	4.424	.046	.0559	.4008	55.48	.7968
%RSD	2.741	.4055	15.99	105	20.22	444.2

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.63630	.56110	-.79368	-3.909	-.2302	-1.1325
SDev	.30533	.102	1.4624	2.304	0	.14607
%RSD	47.986	18.179	184.26	58.95	0	12.899

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.3839	2.831	1.4919	.09638	1.0719	-1.4891
SDev	.2907	.2239	1.3183	.81109	3.2814	1.1805
%RSD	75.71	7.91	88.362	841.52	306.13	79.273

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-2.5650	.09062	5.0000	15469.4
SDev	1.005	1.6908	0	33.0925
%RSD	39.18	1865.7	0	.21392

Method: TOTAL Sample Name: 240-921-j-6-a Operator: KLC
Run Time: 06/27/11 12:47 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.6057	8.942	1.5856	9.815	5.351	.0909
SDev	.0251	3.742	.22653	.036	.0515	.0013
%RSD	4.139	41.85	14.287	.3671	.9616	1.434

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	37150.	.0564	.6993	-.2623	-.5628	-9.606
SDev	109.5	.0059	.0002	.0019	.0781	2.528
%RSD	.2949	10.48	.031	.711	13.88	26.31

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1008.	4806.	9.082	-.8827	3099.	.3676
SDev	12.9	12.05	.0828	2.19	107.7	.2673
%RSD	1.28	.2508	.9113	248.2	3.476	72.7

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.10374	-.19213	-.65664	-2.974	-.8945	-.11532
SDev	.08564	.28505	2.7391	.0836	.0009	2.672
%RSD	82.555	148.36	417.14	2.811	.1053	2317

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.0551	1.218	-1.4664	.44404	2.1418	-1.2248
SDev	.2467	.0185	1.711	.42682	3.0178	1.635
%RSD	447.7	1.52	116.68	96.121	140.9	133.49

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-1.1471	-.41179	5.0000	15452.7
SDev	.9882	3.6133	0	21.9203
%RSD	86.15	877.43	0	.14185

Method: TOTAL Sample Name: 240-921-g-7-a Operator: KLC
Run Time: 06/27/11 12:52 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.7035	13.21	1.1864	11.00	5.200	.0978
SDev	.0261	.9298	1.2071	.2064	.0085	.0152
%RSD	3.704	7.038	101.74	1.876	.1636	15.5

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	39300.	-.0148	.9853	-.0581	-.7713	1440.
SDev	35.44	.0335	.4925	.0017	.2338	.4784
%RSD	.0902	226.8	49.98	2.892	30.31	.0332

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	804.2	3797.	134.2	.1630	4130.	-.6303
SDev	3.312	6.958	.1375	.4133	18.97	.5529
%RSD	.4119	.1832	.1025	253.6	.4592	87.73

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.78761	-.70222	-.64421	-2.361	-.9225	.03851
SDev	.38857	1.2863	1.1456	.1309	.001	1.3824
%RSD	49.336	183.17	177.82	5.544	.1066	3589.2

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1449	1.254	-2.5868	.23862	-.85206	-.75543
SDev	.3463	.0251	.52466	1.6665	1.5143	1.3386
%RSD	238.9	2	20.283	698.37	177.72	177.19

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-1.9087	-.01290	5.0000	14827.9
SDev	.00422	1.7196	0	21.0716
%RSD	.22141	13320	0	.1421

Method: TOTAL Sample Name: 240-921-g-18-a Operator: KLC
Run Time: 06/27/11 12:58 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.5939	24.07	-.56466	15.42	7.592	.1756
SDev	.76	3.928	.83149	.1506	.0484	.0003
%RSD	128	16.31	147.26	.977	.6374	.1987

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	24960.	-.0442	.0077	-.2067	-.5212	-7.458
SDev	11.48	.0005	.324	.3129	.0557	4.69
%RSD	.046	1.064	4214	151.3	10.69	62.88

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	982.2	6074.	.4375	2.892	931.1	.0357
SDev	1.769	1.688	.0427	1.028	31.8	.5463
%RSD	.18	.0278	9.754	35.54	3.415	1529

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.1701	.25479	.31926	-2.198	-.4584	-.71292
SDev	.54479	.56728	.9843	.381	.0001	1.4925
%RSD	46.558	222.64	308.3	17.34	.0258	209.35

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1839	2.456	.67534	.04483	2.0444	.73364
SDev	.4289	.001	.638	.53197	.65053	.49199
%RSD	233.2	.0412	94.47	1186.6	31.82	67.062

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-.71927	.83775	5.0000	14998.1
SDev	.51228	1.7315	0	7.77817
%RSD	71.222	206.68	0	.05186

Method: TOTAL Sample Name: 240-921-g-19-a Operator: KLC
Run Time: 06/27/11 13:04 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.2017	259.5	1.7119	7.779	8.677	.2000
SDev	.7116	.0279	.04826	.547	.0709	.0129
%RSD	352.8	.0108	2.8196	7.032	.8166	6.432

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	16960.	.0580	.7238	1.258	2.798	482.6
SDev	11.5	.0335	.2039	.3536	.4069	3.799
%RSD	.0678	57.84	28.17	28.11	14.54	.7873

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	621.5	3194.	16.50	.2927	1732.	.6737
SDev	4.952	.8713	.0822	.6167	112.5	1.3
%RSD	.7968	.0273	.4984	210.7	6.492	192.9

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-2.1697	.55618	-.38137	-1.252	18.59	.06488
SDev	.43793	.54289	.9133	.261	.6138	.18142
%RSD	20.185	97.61	239.48	20.85	3.302	279.59

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	9.877	1.706	-.39930	1.0332	-2.8900	-1.8100
SDev	.3692	.0829	2.0236	.19635	2.7778	.73022
%RSD	3.738	4.856	506.79	19.004	96.116	40.343

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-1.1357	-.00475	5.0000	14908.2
SDev	1.0407	1.8888	0	28.0011
%RSD	91.632	39702	0	.18782

Method: TOTAL Sample Name: mb 240-5892/1-a Operator: KLC
Run Time: 06/27/11 13:11 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.7802	21.25	1.5805	1.412	1.040	.1671
SDev	.2557	.4997	.47264	.3034	.0442	.0122
%RSD	32.77	2.351	29.905	21.49	4.246	7.281

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	292.6	.0213	.1767	.0111	-1.282	8.495
SDev	.4148	.1469	.1941	.0013	.2872	12.03
%RSD	.1417	691.3	109.8	11.55	22.41	141.6

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	164.8	74.66	.8345	-.6063	-230.4	-.1128
SDev	2.755	.3849	.0396	.5919	118.4	.919
%RSD	1.672	.5156	4.745	97.62	51.39	814.8

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.53898	.85634	.26847	-1.512	-.2302	-1.7648
SDev	1.2362	.20987	2.2203	.691	0	3.6936
%RSD	229.36	24.508	827.03	45.7	0	209.29

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.1412	8.219	-.17303	1.3703	2.6051	-2.1087
SDev	.04	.0361	.16237	.23359	4.7297	.50789
%RSD	28.31	.4397	93.842	17.047	181.56	24.086

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-1.1521	.97770	5.0000	15603.5
SDev	2.0095	2.3256	0	15.6979
%RSD	174.41	237.86	0	.1006

Method: TOTAL Sample Name: lcs 240-5892/2-a Operator: KLC
Run Time: 06/27/11 13:16 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	50.06	1952.	1773.2	921.3	2004.	47.93
SDev	.3762	7.432	4.4376	2.446	6.65	.0777
%RSD	.7517	.3807	.25025	.2655	.3319	.162

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	46370.	44.75	452.7	184.3	245.4	915.6
SDev	142.2	.1291	1.272	.7918	.524	4.276
%RSD	.3065	.2884	.281	.4297	.2135	.467

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	50560.	45320.	493.9	887.9	49520.	458.7
SDev	195.9	102.5	1.603	9.458	146.3	1.7
%RSD	.3874	.2261	.3246	1.065	.2954	.3706

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1836.4	442.77	447.16	1797.	934.2	1768.8
SDev	12.5	2.0095	2.5061	8.209	3.025	.22614
%RSD	.68067	.45383	.56044	.4567	.3238	.01278

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	464.9	500.5	433.38	447.46	1795.1	1857.0
SDev	1.351	1.764	3.8977	1.0667	17.636	9.9357
%RSD	.2906	.3524	.89938	.23839	.98247	.53502

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	455.24	443.13	5.0000	14745.8
SDev	2.5251	2.4967	0	1.13178
%RSD	.55466	.56341	0	.00767

Method: TOTAL Sample Name: 240-878-b-1-a Operator: KLC
Run Time: 06/27/11 13:22 Filename: I50627A
Mode: CONC Type: S Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-.0094	88.22	2.5913	71.94	6.518	.2100
SDev	.1298	1.866	1.0486	.2771	.0254	.0024
%RSD	1381	2.116	40.468	.3851	.3892	1.151

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	11500.	.0176	.7625	1.963	1.783	165.3
SDev	43.71	.0017	.1189	.3114	.2189	6.514
%RSD	.3801	9.554	15.59	15.86	12.28	3.941

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	61270.	2666.	218.4	8.574	93200.	345.2
SDev	112.1	12.6	1.087	.7755	128.3	2.356
%RSD	.1829	.4725	.4977	9.044	.1377	.6826

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1.0432	.93774	1.2021	11.86	1.768	1.1085
SDev	.35338	.55681	.48637	.0376	.0048	.53922
%RSD	33.874	59.378	40.46	.3172	.2707	48.645

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	.9732	107.4	.62050	1.0961	4.3865	-.62593
SDev	.2067	.5595	.46681	1.0679	4.6575	1.7955
%RSD	21.24	.521	75.231	97.421	106.18	286.85

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	-.71343	2.1585	5.0000	15412.9
SDev	.4991	.48001	0	36.9111
%RSD	69.959	22.239	0	.23948

Method: TOTAL Sample Name: CCV Operator: KLC
Run Time: 06/27/11 13:28 Filename: I50627A
Mode: CONC Type: Q Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1002.	24790.	451.06	4687.	2041.	1897.
SDev	1.346	54.86	1.2261	3.191	2.34	3.434
%RSD	.1342	.2213	.27181	.0681	.1147	.181

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	46660.	449.8	1865.	1888.	1997.	23190.
SDev	128.9	1.441	4.129	3.289	1.335	42.08
%RSD	.2763	.3204	.2213	.1742	.0669	.1815

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	52770.	45730.	1996.	1875.	48200.	1901.
SDev	144	96.33	3.697	18.46	180.6	6.712
%RSD	.2729	.2106	.1852	.9844	.3747	.3531

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	451.13	448.85	469.65	4677.	4877.	899.86
SDev	.52338	.73878	.23417	11.67	9.469	6.6213
%RSD	.11601	.16459	.04986	.2496	.1942	.7358

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	1898.	1931.	442.59	451.97	449.10	452.13
SDev	3.617	4.795	.26948	.97307	1.1535	.2088
%RSD	.1905	.2484	.06088	.21529	.25683	.04618

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	483.70	462.64	5.0000	14665.2
SDev	.68513	.00902	0	24.6079
%RSD	.14164	.00194	0	.16779

Method: TOTAL Sample Name: CCB Operator: KLC
Run Time: 06/27/11 13:33 Filename: I50627A
Mode: CONC Type: Q Corr. Factor: 1.00000
Lab ID.: N.CANTON Cust. Smpl. ID.: Cust. ID.:

Elems	Ag	Al	As	B	Ba	Be
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	Q8.053	66.02	4.2244	-1.158	-.4255	.2255
SDev	11.67	60.11	3.8434	5.044	.6821	.1238
%RSD	145	91.04	90.982	435.7	160.3	54.91

Elems	Ca	Cd	Co	Cr	Cu	Fe
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	3.549	.4563	Q6.687	Q5.820	-4.064	-37.19
SDev	11.63	.5844	9.017	7.87	2.758	48.56
%RSD	327.8	128.1	134.8	135.2	67.85	130.6

Elems	K	Mg	Mn	Mo	Na	Ni
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	322.4	-10.93	-.1166	Q14.00	Q1930.	9.201
SDev	214	27.61	.4659	12.53	2777	10.79
%RSD	66.37	252.7	399.5	89.49	143.9	117.3

Elems	Se	Pb	Sb	Sn	Ti	Tl
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	2.8518	-1.1174	Q-23.707	-5.654	-.2366	-6.7812
SDev	.17988	2.9381	36.212	4.932	1.256	6.7913
%RSD	6.3079	262.94	152.75	87.23	530.8	100.15

Elems	V	Zn	2203\1	2203\2	1960\1	1960\2
Units	ppb	ppb	ppb	ppb	ppb	ppb
Avge	-1.445	-.0417	47.383	-25.331	53.986	-22.677
SDev	3.121	.8595	65.181	36.947	78.19	39.306
%RSD	216	2060	137.56	145.85	144.83	173.33

Elems	2068/2	2068/1	Y_3710	*Y
Units	ppb	ppb	ppb	
Avge	23.133	-47.092	5.0000	15414.1
SDev	32.248	70.391	0	156.271
%RSD	139.4	149.48	0	1.01381

MTTRBLKWATER04

Test America North Canton ICP Data Review Checklist

Run/Project Information:

Run Date: 6/27/11 Analyst: BLD Instrument: I5

Review Items

A. Calibration/Instrument Run QC	Yes	No	N/A	2nd Level
1. Instrument calibrated per manufacturer's instructions (minimum 2 exposures/sample) and at SOP specified levels?	✓			✓
2. ICV/CCV analyzed at appropriate frequency and within control limits? *(ICV (2nd source):* 200.7=95 –105%, 6010B 90-110%) *(CCV: 90 – 110%)*	✓			✓
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			✓
4. CRI run at SOP or project-specific frequency? Recovered within QC limits? (project specific limits may vary)	✓			✓
5. ICSA/ICSAB run at required frequency and within SOP limits?	✓			✓
B. Sample Results				
1. Were samples with concentrations > the linear range for any parameter diluted and reanalyzed?	✓			✓
2. All reported results bracketed by in control QC?	✓			✓
3. Was the internal standard(s) within acceptance criteria for all results reported?	✓			✓
3. Sample analyses done within holding time?	✓			✓
C. Preparation/Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			✓
2. Method blank done per prep batch and < RL?	✓			✓
3. MS/MSD run at required frequency and within limits?	✓			✓
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			✓
5. Serial dilution done per prep batch?	✓			✓
6. Post digest spike analyzed if required?			✓	
D. Other				
1. Are all nonconformances documented appropriately?	✓			✓
2. Current IDL/MDL/LR/IEC data on file?	✓			✓
3. Calculations checked for error?	✓			✓
4. Transcriptions checked for error?	✓			✓
5. All client/project specific requirements met?	✓			✓
6. Date/time of analysis verified as correct?	✓			✓

Level I Analyst: BLD Date: 6/28/11 Time: 9:10 - 13:33
Level I Analyst: _____ Date: _____ Time: _____
Level I Analyst: _____ Date: _____ Time: _____

Level II Reviewer: Karen Klontz Date: 7-1-11 Time: 9:10 - 13:33
Level II Reviewer: _____ Date: _____ Time: _____
Level II Reviewer: _____ Date: _____ Time: _____

Comments: _____

TestAmerica North Canton Hg Data Review Checklist

Run/Project Information:

Circle Methods used: (7470A / 245.1 : CORP-MT-0005 Rev 1) 7471: CORP-MT-0007 Rev 1

Run Date: 6-22-11 Analyst: RLG Instrument: H 1

Review Items

A. Calibration/Instrument Run QC	Yes	No	N/A	2nd Level
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels?	✓			
2. ICV/CCV analyzed at appropriate frequency and within control limits?	✓			
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			
4. CRA run?	✓			
B. Sample Results				
1. Were samples with concentrations > high calibration standard diluted and reanalyzed?			✓	
2. All reported results bracketed by in control QC?	✓			
3. Sample analyses done within holding time?	✓			
C. Preparation/ Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			
2. Method blank done per prep batch and < RL?	✓			
3. MS run at required frequency and within limits?	✓			
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			
D. Other				
1. Are all nonconformances documented appropriately?			✓	
2. Current IDL/MDL data on file?	✓			
3. Calculations and Transcription checked for error?	✓			
4. All client/project specific requirements met?	✓			
5. Date of analysis verified as correct?	✓			

Level I Analyst: Roger K. Lott Date/Time: 6-25-11

Level I Analyst: _____ Date/Time: _____

Comments: _____

2nd Level Reviewer: Melissa Cordell Date/Time: 6-27-11

2nd Level Reviewer: _____ Date/Time: _____

Curve Prepared Date: 6-22-11 Time: 15:55 DILUTION H20 NA

TestAmerica North Canton Hg Data Review Checklist

Run/Project Information:

Circle Methods used: (7470A / 245.1 : CORP-MT-0005 Rev 1) 7471: CORP-MT-0007 Rev 1

Run Date: 6-22-11 Analyst: RLG Instrument: H 1

Review Items

A. Calibration/Instrument Run QC	Yes	No	N/A	2nd Level
1. Instrument calibrated per manufacturer's instructions and at SOP specified levels?	✓			
2. ICV/CCV analyzed at appropriate frequency and within control limits?	✓			
3. ICB/CCB analyzed at appropriate frequency and within +/- RL?	✓			
4. CRA run?	✓			
B. Sample Results				
1. Were samples with concentrations > high calibration standard diluted and reanalyzed?			✓	
2. All reported results bracketed by in control QC?	✓			
3. Sample analyses done within holding time?	✓			
C. Preparation/ Matrix QC				
1. LCS done per prep batch and within QC limits?	✓			
2. Method blank done per prep batch and < RL?	✓			
3. MS run at required frequency and within limits?	✓			
4. MSD or DU run at required frequency and RPD within SOP limits?	✓			
D. Other				
1. Are all nonconformances documented appropriately?			✓	
2. Current IDL/MDL data on file?	✓			
3. Calculations and Transcription checked for error?	✓			
4. All client/project specific requirements met?	✓			
5. Date of analysis verified as correct?	✓			

Level I Analyst: Roger K. Lott Date/Time: 6-25-11

Level I Analyst: _____ Date/Time: _____

Comments: _____

2nd Level Reviewer: Melissa Cordell Date/Time: 6-27-11

2nd Level Reviewer: _____ Date/Time: _____

Curve Prepared Date: 6-22-11 Time: 15:55 DILUTION H20 NA

```
*** Standard: 1 Rep: 1              Seq:  0       16:46:31 22 Jun 2011 HG

Hg    .0000   ppb      6318

*** Standard: 2 Rep: 1              Seq:  1       16:47:47 22 Jun 2011 HG

Hg    .2000   ppb      12180

*** Standard: 3 Rep: 1              Seq:  2       16:49:02 22 Jun 2011 HG

Hg    .5000   ppb      22540

*** Standard: 4 Rep: 1              Seq:  3       16:50:17 22 Jun 2011 HG

Hg    1.000   ppb      39465

*** Standard: 5 Rep: 1              Seq:  4       16:51:33 22 Jun 2011 HG

Hg    5.000   ppb      193187

*** Standard: 6 Rep: 1              Seq:  5       16:52:50 22 Jun 2011 HG

Hg    10.00   ppb      367402
```

RunProt: HGPPB | Err: Analyzer needs maintenance

RunFold: HG18622A Seq: 6 Batch:

Prnt: R/T On Pump: On

Rev: 4.2 Xmit: Off Gas: 0.70 LPM

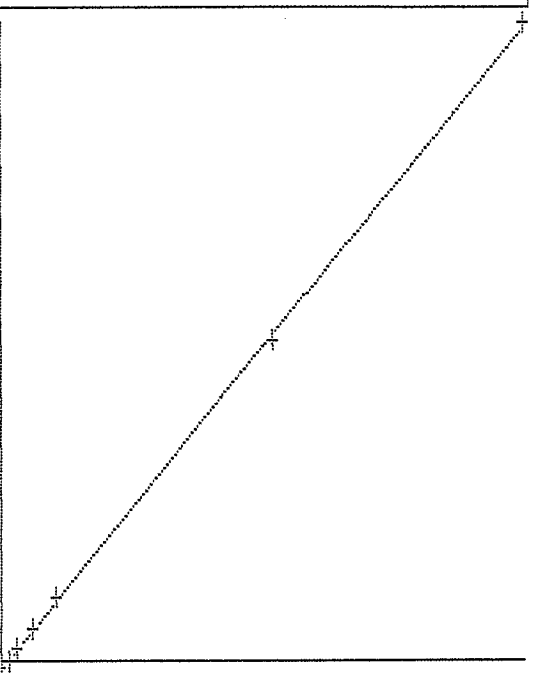
State: Idle Macro HG 59: F3 Print User: A/S: On

CALIBRATION: Line proto: HGPPB

	Hg Conc.	Calc.	Dev.	Accepted ->linear
S1	.0000	.0262	.0262	Quadratic
S2	.2000	.1870	-.0130	Wtdlinear
S3	.5000	.4711	-.0289	
S4	1.000	.9353	-.0647	Accept
S5	5.000	5.151	.1512	
S6	10.00	9.929	-.0708	

A .00000000 r .999789

B 2.74257e-5 C -1.47065e-1



	Mean		SD	
S1	6318	0	SD	6318
S2	12180	0	%RSD	12180
S3	22540	0	%RSD	22540
S4	39465	0	%RSD	39465
S5	193187	0	%RSD	193187
S6	367402	0	%RSD	367402

New cal coefficients stored

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 5 Ck5ICV Seq: 6 16:54:12 22 Jun 2011 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		104.1	2.602	2.500	ppb	.0000 %

*** Check Standard: 4 Ck4ICB Seq: 7 16:55:28 22 Jun 2011 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		-980300	-.0980	.0000	ppb	.0000 %

*** Check Standard: 3 Ck3CRA\MRL Seq: 8 16:56:43 22 Jun 2011 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		95.12	.1902	.2000	ppb	.0000 %

*** Check Standard: 2 Ck2CCV Seq: 9 16:58:03 22 Jun 2011 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.2	5.061	5.000	ppb	.0000 %

*** Check Standard: 1 Ck1CCB Seq: 10 16:59:18 22 Jun 2011 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0747	.2000	ppb	.0000 %

*** Sample ID: 00065559 Seq: 11 17:00:32 22 Jun 2011 HG
mb 240-5371/1-a

Hg	-.0303	ppb	.0000 %	-.0303	

*** Sample ID: 00065560 Seq: 12 17:01:46 22 Jun 2011 HG
lcs 240-5371/2-a

Hg	5.201	ppb	.0000 %	5.201	

*** Sample ID: 00065561 Seq: 13 17:03:03 22 Jun 2011 HG
240-531-e-2-d

Hg	2.123	ppb	.0000 %	2.123	

*** Sample ID: 00065562 Seq: 14 17:04:20 22 Jun 2011 HG
240-531-e-2-e ms

Hg	3.175	ppb	.0000 %	3.175	

*** Sample ID: 00065563 Seq: 15 17:05:36 22 Jun 2011 HG
240-531-e-2-f du

Hg	2.033	ppb	.0000 %	2.033	

*** Sample ID: 00065564 Seq: 16 17:07:06 22 Jun 2011 HG
240-531-f-2-b

Hg	.9490	ppb	.0000 %	.9490	

*** Sample ID: 00065565 Seq: 17 17:08:23 22 Jun 2011 HG
240-531-h-4-b

Hg	-.0713	ppb	.0000 %	-.0713	

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: 00065566 Seq: 18 17:09:38 22 Jun 2011 HG
240-531-i-4-b
Hg -.0253 ppb .0000 % -.0253

*** Sample ID: 00065567 Seq: 19 17:10:58 22 Jun 2011 HG
240-531-e-3-b
Hg -.0473 ppb .0000 % -.0473

*** Sample ID: 00065568 Seq: 20 17:12:15 22 Jun 2011 HG
240-531-f-3-b
Hg -.1036 ppb .0000 % -.1036

*** Check Standard: 2 Ck2CCV Seq: 21 17:13:33 22 Jun 2011 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		102.9	5.145	5.000	ppb	.0000 %

*** Check Standard: 1 Ck1CCB Seq: 22 17:14:58 22 Jun 2011 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0066	.2000	ppb	.0000 %

*** Sample ID: 00065569 Seq: 23 17:16:13 22 Jun 2011 HG
240-569-g-2-b
Hg -.0392 ppb .0000 % -.0392

*** Sample ID: 00065570 Seq: 24 17:17:28 22 Jun 2011 HG
240-569-h-2-b
Hg -.1321 ppb .0000 % -.1321

*** Sample ID: 00065571 Seq: 25 17:18:42 22 Jun 2011 HG
240-569-g-3-b
Hg .0096 ppb .0000 % .0096

*** Sample ID: 00065572 Seq: 26 17:20:01 22 Jun 2011 HG
240-569-h-3-b
Hg -.0585 ppb .0000 % -.0585

*** Sample ID: 00065573 Seq: 27 17:21:18 22 Jun 2011 HG
240-569-g-4-b
Hg -.0478 ppb .0000 % -.0478

*** Sample ID: 00065574 Seq: 28 17:22:34 22 Jun 2011 HG
240-569-h-4-b
Hg -.0782 ppb .0000 % -.0782

*** Sample ID: 00065575 Seq: 29 17:23:49 22 Jun 2011 HG
240-569-e-5-b
Hg -.0953 ppb .0000 % -.0953

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: 00065576 Seq: 30 17:25:10 22 Jun 2011 HG
240-569-f-5-b
Hg -.0305 ppb .0000 % -.0305

*** Sample ID: 00065577 Seq: 31 17:26:35 22 Jun 2011 HG
240-626-g-5-b
Hg -.0309 ppb .0000 % -.0309

*** Sample ID: 00065578 Seq: 32 17:27:53 22 Jun 2011 HG
240-626-h-5-b
Hg -.0830 ppb .0000 % -.0830

*** Check Standard: 2 Ck2CCV Seq: 33 17:29:12 22 Jun 2011 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		101.4	5.070	5.000	ppb	.0000 %

*** Check Standard: 1 Ck1CCB Seq: 34 17:30:30 22 Jun 2011 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0401	.2000	ppb	.0000 %

*** Sample ID: 00065579 Seq: 35 17:31:49 22 Jun 2011 HG
240-626-e-6-b
Hg 5.208 ppb .0000 % 5.208

*** Sample ID: 00065580 Seq: 36 17:33:05 22 Jun 2011 HG
240-626-f-6-b
Hg .3931 ppb .0000 % .3931

*** Sample ID: 00065581 Seq: 37 17:34:31 22 Jun 2011 HG
240-626-g-7-b
Hg -.1347 ppb .0000 % -.1347

*** Sample ID: 00065582 Seq: 38 17:35:47 22 Jun 2011 HG
240-626-h-7-b
Hg -.0409 ppb .0000 % -.0409

*** Sample ID: 00065424 Seq: 39 17:37:03 22 Jun 2011 HG
mb 240-5359/1-a
Hg -.0746 ppb .0000 % -.0746

*** Sample ID: 00065425 Seq: 40 17:38:19 22 Jun 2011 HG
lcs 240-5359/2-a
Hg 5.095 ppb .0000 % 5.095

*** Sample ID: 00065426 Seq: 41 17:39:35 22 Jun 2011 HG
240-759-d-6-a
Hg -.1878 ppb .0000 % -.1878

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: 00065427 Seq: 42 17:40:51 22 Jun 2011 HG
240-759-d-6-b ms
Hg .9622 ppb .0000 % .9622

*** Sample ID: 00065428 Seq: 43 17:42:08 22 Jun 2011 HG
240-759-d-6-c msd
Hg .9916 ppb .0000 % .9916

*** Sample ID: 00065429 Seq: 44 17:43:23 22 Jun 2011 HG
240-626-e-8-a
Hg -.0400 ppb .0000 % -.0400

*** Check Standard: 2 Ck2CCV Seq: 45 17:44:39 22 Jun 2011 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		100.4	5.022	5.000	ppb	.0000 %

*** Check Standard: 1 Ck1CCB Seq: 46 17:46:05 22 Jun 2011 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		.0325	.2000	ppb	.0000 %

*** Sample ID: 00065430 Seq: 47 17:47:24 22 Jun 2011 HG
240-626-f-8-a
Hg -.0146 ppb .0000 % -.0146

*** Sample ID: 00065431 Seq: 48 17:48:40 22 Jun 2011 HG
240-626-e-9-a
Hg -.0639 ppb .0000 % -.0639

*** Sample ID: 00065432 Seq: 49 17:49:58 22 Jun 2011 HG
240-626-f-9-a
Hg -.1174 ppb .0000 % -.1174

*** Sample ID: 00065433 Seq: 50 17:51:15 22 Jun 2011 HG
240-701-d-13-a
Hg -.0658 ppb .0000 % -.0658

*** Sample ID: 00065434 Seq: 51 17:52:31 22 Jun 2011 HG
240-759-b-1-a
Hg -.0720 ppb .0000 % -.0720

*** Sample ID: 00065435 Seq: 52 17:53:49 22 Jun 2011 HG
240-759-b-2-a
Hg .0096 ppb .0000 % .0096

*** Sample ID: 00065436 Seq: 53 17:55:05 22 Jun 2011 HG
240-759-b-3-a
Hg -.0370 ppb .0000 % -.0370

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: 00065437 Seq: 54 17:56:22 22 Jun 2011 HG
240-759-b-4-a
Hg -.0727 ppb .0000 % -.0727

*** Sample ID: 00065438 Seq: 55 17:58:02 22 Jun 2011 HG
240-759-b-5-a
Hg -.0780 ppb .0000 % -.0780

*** Sample ID: 00065439 Seq: 56 17:59:19 22 Jun 2011 HG
240-650-B-1-A
Hg -.0648 ppb .0000 % -.0648

*** Check Standard: 2 Ck2CCV Seq: 57 18:00:48 22 Jun 2011 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.80	4.990	5.000	ppb	.0000 %

*** Check Standard: 1 Ck1CCB Seq: 58 18:02:03 22 Jun 2011 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0540	.2000	ppb	.0000 %

*** Sample ID: 00065440 Seq: 59 18:03:18 22 Jun 2011 HG
240-650-b-2-a
Hg -.0329 ppb .0000 % -.0329

*** Sample ID: 00065441 Seq: 60 18:04:33 22 Jun 2011 HG
240-650-b-3-a
Hg -.1262 ppb .0000 % -.1262

*** Sample ID: 00065442 Seq: 61 18:05:49 22 Jun 2011 HG
240-650-b-4-a
Hg -.0623 ppb .0000 % -.0623

*** Sample ID: 00065443 Seq: 62 18:07:05 22 Jun 2011 HG
240-650-b-5-a
Hg -.0681 ppb .0000 % -.0681

*** Sample ID: 00065444 Seq: 63 18:08:33 22 Jun 2011 HG
240-650-b-6-a
Hg -.0277 ppb .0000 % -.0277

*** Sample ID: 00065445 Seq: 64 18:09:48 22 Jun 2011 HG
240-650-b-7-a
Hg -.0428 ppb .0000 % -.0428

*** Sample ID: 00065446 Seq: 65 18:11:07 22 Jun 2011 HG
240-650-b-8-a
Hg -.0503 ppb .0000 % -.0503

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: 00065447 Seq: 66 18:12:22 22 Jun 2011 HG
240-650-b-9-a
Hg -.0194 ppb .0000 % -.0194

*** Sample ID: 00066502 Seq: 67 18:13:38 22 Jun 2011 HG
mb 240-5468/1-a
Hg -.0258 ppb .0000 % -.0258

*** Sample ID: 00066503 Seq: 68 18:14:55 22 Jun 2011 HG
lcs 240-5468/2-a
Hg 4.797 ppb .0000 % 4.797

*** Check Standard: 2 Ck2CCV Seq: 69 18:16:12 22 Jun 2011 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		99.49	4.974	5.000	ppb	.0000 %

*** Check Standard: 1 Ck1CCB Seq: 70 18:17:31 22 Jun 2011 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0939	.2000	ppb	.0000 %

*** Sample ID: 00066504 Seq: 71 18:18:48 22 Jun 2011 HG
240-705-ao-1-a
Hg -.1183 ppb .0000 % -.1183

*** Sample ID: 00066505 Seq: 72 18:20:04 22 Jun 2011 HG
240-705-ao-1-b ms
Hg .7197 ppb .0000 % .7197

*** Sample ID: 00066506 Seq: 73 18:21:22 22 Jun 2011 HG
240-705-ao-1-c msd
Hg .7468 ppb .0000 % .7468

*** Sample ID: 00066507 Seq: 74 18:22:38 22 Jun 2011 HG
240-719-o-1-a
Hg -.0539 ppb .0000 % -.0539

*** Sample ID: 00066508 Seq: 75 18:24:06 22 Jun 2011 HG
240-719-o-1-b ms
Hg .8235 ppb .0000 % .8235

*** Sample ID: 00066509 Seq: 76 18:25:22 22 Jun 2011 HG
240-719-o-1-c msd
Hg .9131 ppb .0000 % .9131

*** Sample ID: 00066510 Seq: 77 18:26:52 22 Jun 2011 HG
240-616-i-1-a
Hg .0622 ppb .0000 % .0622

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: 00066511 Seq: 78 18:28:07 22 Jun 2011 HG
240-699-d-7-a
Hg -.0353 ppb .0000 % -.0353

*** Sample ID: 00066512 Seq: 79 18:29:23 22 Jun 2011 HG
240-716-b-1-a
Hg -.0608 ppb .0000 % -.0608

*** Sample ID: 00066513 Seq: 80 18:30:38 22 Jun 2011 HG
240-716-a-1-a
Hg -.0694 ppb .0000 % -.0694

*** Check Standard: 2 Ck2CCV Seq: 81 18:31:58 22 Jun 2011 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		87.31	4.365	5.000	ppb	.0000 %

*** Check Standard: 1 Ck1CCB Seq: 82 18:33:13 22 Jun 2011 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0491	.2000	ppb	.0000 %

Re-analyze

*** Sample ID: 00066514 Seq: 83 18:34:29 22 Jun 2011 HG
240-716-b-2-a
Hg -.0506 ppb .0000 % -.0506

*** Sample ID: 00066515 Seq: 84 18:35:45 22 Jun 2011 HG
240-716-a-2-a
Hg -.0037 ppb .0000 % -.0037

*** Sample ID: 00066516 Seq: 85 18:37:03 22 Jun 2011 HG
240-716-b-3-a
Hg -.0721 ppb .0000 % -.0721

*** Sample ID: 00066517 Seq: 86 18:38:23 22 Jun 2011 HG
240-716-a-3-a
Hg -.0420 ppb .0000 % -.0420

*** Sample ID: 00066518 Seq: 87 18:39:39 22 Jun 2011 HG
240-716-b-4-a
Hg -.0367 ppb .0000 % -.0367

*** Sample ID: 00066519 Seq: 88 18:40:56 22 Jun 2011 HG
240-716-b-5-a
Hg -.0083 ppb .0000 % -.0083

*** Sample ID: 00066520 Seq: 89 18:42:15 22 Jun 2011 HG
240-716-a-5-a
Hg -.0753 ppb .0000 % -.0753

Re-analyze

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: 00066521 Seq: 90 18:43:32 22 Jun 2011 HG
240-719-e-2-a
Hg -.0258 ppb .0000 % -.0258

*** Sample ID: 00066522 Seq: 91 18:44:48 22 Jun 2011 HG
240-719-e-4-a
Hg -.0179 ppb .0000 % -.0179

*** Sample ID: 00066523 Seq: 92 18:46:04 22 Jun 2011 HG
240-719-e-5-a
Hg .0443 ppb .0000 % .0443

*** Check Standard: 2 Ck2CCV Seq: 93 18:47:21 22 Jun 2011 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg	L	3.718	.1859	5.000	ppb	.0000 %

*** Check Standard: 1 Ck1CCB Seq: 94 18:48:36 22 Jun 2011 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0618	.2000	ppb	.0000 %

*** Sample ID: 00066524 Seq: 95 18:49:51 22 Jun 2011 HG
240-719-e-6-a
Hg -.0704 ppb .0000 % -.0704

*** Sample ID: 00066525 Seq: 96 18:51:09 22 Jun 2011 HG
240-719-a-7-a
Hg -.0207 ppb .0000 % -.0207

*** Sample ID: 00066526 Seq: 97 18:52:28 22 Jun 2011 HG
240-719-e-8-a
Hg -.0275 ppb .0000 % -.0275

*** Sample ID: 00066527 Seq: 98 18:53:45 22 Jun 2011 HG
240-719-e-9-a
Hg -.0656 ppb .0000 % -.0656

*** Sample ID: Seq: 99 18:55:02 22 Jun 2011 HG

Hg -.1487 ppb .0000 % -.1487

*** Sample ID: Seq: 100 18:56:21 22 Jun 2011 HG

Hg -.1379 ppb .0000 % -.1379

*** Sample ID: Seq: 101 18:57:38 22 Jun 2011 HG

Hg -.1397 ppb .0000 % -.1397

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Check Standard: 2 Ck2CCV Seq: 102 18:58:56 22 Jun 2011 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg	L	-2.673	-.1336	5.000	ppb	.0000 %

*** Check Standard: 1 Ck1CCB Seq: 103 19:00:15 22 Jun 2011 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.0830	.2000	ppb	.0000 %

METALS BATCH WORKSHEET

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Batch Number: 5513 Batch Start Date: 06/21/11 12:30 Batch Analyst: McGall, Lisa

Batch Method: 3005A Batch End Date: 06/21/11 16:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAGSPIKEW 00005	MTHCL 00008	MTHNO3 00008	MTICP1 00005
MB 240-5513/1		3005A, 6010B		50 mL	50 mL		2.5 mL	1 mL	
LCS 240-5513/2		3005A, 6010B		50 mL	50 mL	1 mL	2.5 mL	1 mL	1 mL
240-759-E-6	MW-206B(053111)	3005A, 6010B	D	50 mL	50 mL		2.5 mL	1 mL	
240-759-E-6 MS	MW-206B(053111)	3005A, 6010B	D	50 mL	50 mL	1 mL	2.5 mL	1 mL	1 mL
240-759-E-6 MSD	MW-206B(053111)	3005A, 6010B	D	50 mL	50 mL	1 mL	2.5 mL	1 mL	1 mL
240-759-B-1	MW-203B(053111)	3005A, 6010B	D	50 mL	50 mL		2.5 mL	1 mL	
240-759-B-2	FD-1(053111)-TP	3005A, 6010B	D	50 mL	50 mL		2.5 mL	1 mL	
240-759-B-3	MW-202B(053111)	3005A, 6010B	D	50 mL	50 mL		2.5 mL	1 mL	
240-759-B-4	MW-201B(053111)	3005A, 6010B	D	50 mL	50 mL		2.5 mL	1 mL	
240-759-B-5	EB-1(053111)-TP	3005A, 6010B	D	50 mL	50 mL		2.5 mL	1 mL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTICP2A 00005					
MB 240-5513/1		3005A, 6010B							
LCS 240-5513/2		3005A, 6010B		1 mL					
240-759-E-6	MW-206B(053111)	3005A, 6010B	D						
240-759-E-6 MS	MW-206B(053111)	3005A, 6010B	D	1 mL					
240-759-E-6 MSD	MW-206B(053111)	3005A, 6010B	D	1 mL					
240-759-B-1	MW-203B(053111)	3005A, 6010B	D						
240-759-B-2	FD-1(053111)-TP	3005A, 6010B	D						
240-759-B-3	MW-202B(053111)	3005A, 6010B	D						
240-759-B-4	MW-201B(053111)	3005A, 6010B	D						
240-759-B-5	EB-1(053111)-TP	3005A, 6010B	D						

Batch Notes	
Filter Paper Lot Number	398267
Digestion Tube/Cup Lot #	1012101

Basis	Basis Description
D	Dissolved

METALS BATCH WORKSHEET

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Batch Number: 5359 Batch Start Date: 06/20/11 14:05 Batch Analyst: McGall, Lisa

Batch Method: 7470A Batch End Date: 06/20/11 16:05

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTH2S04 00003	MTHGICVW 00053	MTHNO3 00008	MTK2S208RGNT 00002
MB 240-5359/1		7470A, 7470A		100 mL	100 mL	5 mL		2.5 mL	8 mL
LCS 240-5359/2		7470A, 7470A		100 mL	100 mL	5 mL	5 mL	2.5 mL	8 mL
240-759-D-6	MW-206B(053111)	7470A, 7470A	D	100 mL	100 mL	5 mL		2.5 mL	8 mL
240-759-D-6 MS	MW-206B(053111)	7470A, 7470A	D	100 mL	100 mL	5 mL	1 mL	2.5 mL	8 mL
240-759-D-6 MSD	MW-206B(053111)	7470A, 7470A	D	100 mL	100 mL	5 mL	1 mL	2.5 mL	8 mL
240-759-B-1	MW-203B(053111)	7470A, 7470A	D	100 mL	100 mL	5 mL		2.5 mL	8 mL
240-759-B-2	FD-1(053111)-TP	7470A, 7470A	D	100 mL	100 mL	5 mL		2.5 mL	8 mL
240-759-B-3	MW-202B(053111)	7470A, 7470A	D	100 mL	100 mL	5 mL		2.5 mL	8 mL
240-759-B-4	MW-201B(053111)	7470A, 7470A	D	100 mL	100 mL	5 mL		2.5 mL	8 mL
240-759-B-5	EB-1(053111)-TP	7470A, 7470A	D	100 mL	100 mL	5 mL		2.5 mL	8 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTKMN04W 00002					
MB 240-5359/1		7470A, 7470A		15 mL					
LCS 240-5359/2		7470A, 7470A		15 mL					
240-759-D-6	MW-206B(053111)	7470A, 7470A	D	15 mL					
240-759-D-6 MS	MW-206B(053111)	7470A, 7470A	D	15 mL					
240-759-D-6 MSD	MW-206B(053111)	7470A, 7470A	D	15 mL					
240-759-B-1	MW-203B(053111)	7470A, 7470A	D	15 mL					
240-759-B-2	FD-1(053111)-TP	7470A, 7470A	D	15 mL					
240-759-B-3	MW-202B(053111)	7470A, 7470A	D	15 mL					
240-759-B-4	MW-201B(053111)	7470A, 7470A	D	15 mL					
240-759-B-5	EB-1(053111)-TP	7470A, 7470A	D	15 mL					

Batch Notes	

Basis	Basis Description
D	Dissolved

METALS BATCH WORKSHEET

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Batch Number: 5707 Batch Start Date: 06/22/11 13:55 Batch Analyst: Elshaw, Dale

Batch Method: 7470A Batch End Date: 06/22/11 15:55

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTH2S04 00004	MTHGCALW 00034	MTHGICVW 00055	MTHNO3 00008
ICV 240-5707/7		7470A, 7470A		100 mL	100 mL	5 mL		2.5 mL	2.5 mL
ICB 240-5707/8		7470A, 7470A		100 mL	100 mL	5 mL			2.5 mL
MRL 240-5707/9		7470A, 7470A		100 mL	100 mL	5 mL	0.2 mL		2.5 mL
CCV 240-5707/10		7470A, 7470A		100 mL	100 mL	5 mL	5 mL		2.5 mL
CCB 240-5707/12		7470A, 7470A		100 mL	100 mL	5 mL			2.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTK2S208RGNT 00002	MTKMN04W 00002				
ICV 240-5707/7		7470A, 7470A		8 mL	15 mL				
ICB 240-5707/8		7470A, 7470A		8 mL	15 mL				
MRL 240-5707/9		7470A, 7470A		8 mL	15 mL				
CCV 240-5707/10		7470A, 7470A		8 mL	15 mL				
CCB 240-5707/12		7470A, 7470A		8 mL	15 mL				

Batch Notes	

Basis	Basis Description

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica North Canton Job Number: 240-759-1

SDG No.:

Project: Former AGT Surface Impoundment-IN000297.

Client Sample ID	Lab Sample ID
MW-203B(053111)	240-759-1
FD-1(053111)-TP	240-759-2
MW-202B(053111)	240-759-3
MW-201B(053111)	240-759-4
EB-1(053111)-TP	240-759-5
MW-206B(053111)	240-759-6

Comments:

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-203B(053111) Lab Sample ID: 240-759-1

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG ID.:

Matrix: Water Date Sampled: 05/31/2011 13:00

Reporting Basis: WET Date Received: 06/01/2011 09:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	0.010	0.010	0.0050	mg/L	U		1	9012A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: FD-1(053111)-TP
Lab Sample ID: 240-759-2
Lab Name: TestAmerica North Canton
Job No.: 240-759-1
SDG ID.:
Matrix: Water
Date Sampled: 05/31/2011 00:00
Reporting Basis: WET
Date Received: 06/01/2011 09:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	0.010	0.010	0.0050	mg/L	U		1	9012A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-202B(053111) Lab Sample ID: 240-759-3

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG ID.:

Matrix: Water Date Sampled: 05/31/2011 14:30

Reporting Basis: WET Date Received: 06/01/2011 09:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	0.010	0.010	0.0050	mg/L	U		1	9012A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-201B(053111) Lab Sample ID: 240-759-4

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG ID.:

Matrix: Water Date Sampled: 05/31/2011 15:45

Reporting Basis: WET Date Received: 06/01/2011 09:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	0.010	0.010	0.0050	mg/L	U		1	9012A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: EB-1(053111)-TP
Lab Sample ID: 240-759-5
Lab Name: TestAmerica North Canton
Job No.: 240-759-1
SDG ID.:
Matrix: Water
Date Sampled: 05/31/2011 16:00
Reporting Basis: WET
Date Received: 06/01/2011 09:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	0.010	0.010	0.0050	mg/L	U		1	9012A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: MW-206B(053111) Lab Sample ID: 240-759-6

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG ID.:

Matrix: Water Date Sampled: 05/31/2011 17:00

Reporting Basis: WET Date Received: 06/01/2011 09:50

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
57-12-5	Cyanide, Total	0.010	0.010	0.0050	mg/L	U		1	9012A

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Analyst: KH Batch Start Date: 06/09/2011

Reporting Units: mg/L Analytical Batch No.: 4249

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	CCV	11:41	Cyanide, Total	0.0975	0.100	97	90-110		WCCN.1CCV1_00010
2	CCB	11:41	Cyanide, Total	0.010				U	
7	CCV	11:46	Cyanide, Total	0.0974	0.100	97	90-110		WCCN.1CCV1_00010
8	CCB	11:46	Cyanide, Total	0.010				U	
16	CCV	11:50	Cyanide, Total	0.0941	0.100	94	90-110		WCCN.1CCV1_00010
17	CCB	11:50	Cyanide, Total	0.010				U	
22	CCVH	12:04	Cyanide, Total	0.106	0.100	106	90-110		WCCN10PPM1_00010
23	CCV	12:06	Cyanide, Total	0.102	0.100	102	90-110		WCCN.1CCV1_00010
24	CCB	12:06	Cyanide, Total	0.010				U	
34	CCV	12:16	Cyanide, Total	0.102	0.100	102	90-110		WCCN.1CCV1_00010
35	CCB	12:16	Cyanide, Total	0.010				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Analyst: BR Batch Start Date: 06/10/2011

Reporting Units: mg/L Analytical Batch No.: 4342

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
1	ICV	11:30	Cyanide, Total	0.0945	0.100	95	90-110		WCCN.1ICV2_00010
2	ICB	11:30	Cyanide, Total	0.010				U	
4	CCV	11:30	Cyanide, Total	0.101	0.100	101	90-110		WCCN.1CCV1_00010
5	CCB	11:30	Cyanide, Total	0.010				U	
10	CCV	11:30	Cyanide, Total	0.102	0.100	102	90-110		WCCN.1CCV1_00010
11	CCB	11:30	Cyanide, Total	0.010				U	
21	CCV	11:30	Cyanide, Total	0.102	0.100	102	90-110		WCCN.1CCV1_00010
22	CCB	11:30	Cyanide, Total	0.010				U	
26	CCVL	11:30	Cyanide, Total	0.0257	0.0250	103	90-110		WCCN10PPM1_00010
27	CCV	11:30	Cyanide, Total	0.101	0.100	101	90-110		WCCN.1CCV1_00010
28	CCB	11:30	Cyanide, Total	0.010				U	
30	CCV	11:30	Cyanide, Total	0.106	0.100	106	90-110		WCCN.1CCV1_00010
31	CCB	11:30	Cyanide, Total	0.010				U	
38	CCVH	13:38	Cyanide, Total	0.0956	0.100	96	90-110		WCCN10PPM1_00010

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 4249	Date: 06/09/2011 11:41	Prep Batch: 4179	Date: 06/09/2011 11:10				
9012A	MB 240-4179/1-A	Cyanide, Total	0.010	U	mg/L	0.010	1
Batch ID: 4342	Date: 06/10/2011 11:30	Prep Batch: 4356	Date: 06/10/2011 11:30				
9012A	MB 240-4356/1-A	Cyanide, Total	0.010	U	mg/L	0.010	1

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 4249	Date: 06/09/2011 11:47		Prep Batch: 4179		Date: 06/09/2011 11:10						
9012A	240-759-6	Cyanide, Total	0.010	U	mg/L						
9012A	240-759-6 MS	Cyanide, Total	0.0412		mg/L	0.0400	103	42-140			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 4249	Date: 06/09/2011 11:47		Prep Batch: 4179		Date: 06/09/2011 11:10						
9012A	240-759-6 MSD	Cyanide, Total	0.0505		mg/L	0.0400	126	42-140	20	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 4249	Date: 06/09/2011 11:41		Prep Batch: 4179			Date: 06/09/2011 11:10					
						LCS Source: WCCNLCS_00003					
9012A	LCS 240-4179/2-A	Cyanide, Total	0.0431		mg/L	0.0393	110	69-118			
Batch ID: 4342	Date: 06/10/2011 11:30		Prep Batch: 4356			Date: 06/10/2011 11:30					
						LCS Source: WCCNLCS_00003					
9012A	LCS 240-4356/2-A	Cyanide, Total	0.453		mg/L	0.393	115	69-118			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

7A-IN
METHOD REPORTING LIMIT CHECK
GENERAL CHEMISTRY

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 4342		Date: 06/10/2011 11:30									
						LCS Source:	WCCN.005MRL1_00011				
9012A	MRL 240-4342/3	Cyanide, Total	0.010	U	mg/L	0.00500	68	70-130			^

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica North Canton Job Number: 240-759-1

SDG Number:

Matrix: Water Instrument ID: SAURON

Method: 9012A MDL Date: 01/28/2010 09:12

Prep Method: 9012A

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Cyanide, Total		0.01	0.005

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica North Canton Job Number: 240-759-1

SDG Number:

Matrix: Water Instrument ID: SAURON

Method: 9012A XMDL Date: 01/28/2010 09:13

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Cyanide, Total		0.01	0.005

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Prep Method: 9012A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-4179/1-A	06/09/2011 11:10	4179		50	25
LCS 240-4179/2-A	06/09/2011 11:10	4179		50	25
240-759-1	06/09/2011 11:10	4179		50	25
240-759-5	06/09/2011 11:10	4179		50	25
240-759-6	06/09/2011 11:10	4179		50	25
240-759-6 MS	06/09/2011 11:10	4179		50	25
240-759-6 MSD	06/09/2011 11:10	4179		50	25

12-IN
PREPARATION LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Prep Method: 9012A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-4356/1-A	06/10/2011 11:30	4356		50	25
LCS 240-4356/2-A	06/10/2011 11:30	4356		50	25
240-759-2	06/10/2011 11:30	4356		50	25
240-759-3	06/10/2011 11:30	4356		50	25
240-759-4	06/10/2011 11:30	4356		50	25

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Instrument ID: SAURON Method: 9012A

Start Date: 06/09/2011 11:41 End Date: 06/09/2011 12:16

Lab Sample ID	D/F	Type	Time	Analytes: CN
CCV 240-4249/1	1		11:41	X
CCB 240-4249/2	1		11:41	X
MB 240-4179/1-A	1	T	11:41	X
LCS 240-4179/2-A	1	T	11:41	X
ZZZZZZ			11:41	
ZZZZZZ			11:41	
CCV 240-4249/7	1		11:46	X
CCB 240-4249/8	1		11:46	X
240-759-1	1	T	11:46	X
ZZZZZZ			11:47	
240-759-6	1	T	11:47	X
240-759-6 MS	1	T	11:47	X
240-759-6 MSD	1	T	11:47	X
ZZZZZZ			11:47	
ZZZZZZ			11:47	
CCV 240-4249/16	1		11:50	X
CCB 240-4249/17	1		11:50	X
CCV 240-4249/18			11:51	
CCB 240-4249/19			11:51	
ZZZZZZ			11:51	
ZZZZZZ			11:51	
CCVH 240-4179/23-A	10		12:04	X
CCV 240-4249/23	1		12:06	X
CCB 240-4249/24	1		12:06	X
ZZZZZZ			12:13	
ZZZZZZ			12:13	
ZZZZZZ			12:13	
ZZZZZZ			12:13	
ZZZZZZ			12:13	
ZZZZZZ			12:13	
ZZZZZZ			12:13	
ZZZZZZ			12:13	
240-759-5	1	T	12:13	X
CCV 240-4249/34	1		12:16	X
CCB 240-4249/35	1		12:16	X

Prep Types
T = Total/NA

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Instrument ID: SAURON Method: 9012A

Start Date: 06/10/2011 11:30 End Date: 06/10/2011 13:38

Lab Sample ID	D/F	Type	Time	Analytes																			
				CN																			
ICV 240-4342/1	1		11:30	X																			
ICB 240-4342/2	1		11:30	X																			
MRL 240-4342/3	1	T	11:30	X																			
CCV 240-4342/4	1		11:30	X																			
CCB 240-4342/5	1		11:30	X																			
MB 240-4356/1-A	1	T	11:30	X																			
ZZZZZZ			11:30																				
ZZZZZZ			11:30																				
240-759-2	1	T	11:30	X																			
CCV 240-4342/10	1		11:30	X																			
CCB 240-4342/11	1		11:30	X																			
240-759-3	1	T	11:30	X																			
240-759-4	1	T	11:30	X																			
ZZZZZZ			11:30																				
ZZZZZZ			11:30																				
ZZZZZZ			11:30																				
ZZZZZZ			11:30																				
ZZZZZZ			11:30																				
ZZZZZZ			11:30																				
ZZZZZZ			11:30																				
CCV 240-4342/21	1		11:30	X																			
CCB 240-4342/22	1		11:30	X																			
ZZZZZZ			11:30																				
ZZZZZZ			11:30																				
ZZZZZZ			11:30																				
CCVL 240-4356/25-A	1		11:30	X																			
CCV 240-4342/27	1		11:30	X																			
CCB 240-4342/28	1		11:30	X																			
LCS 240-4356/2-A	1	T	11:30	X																			
CCV 240-4342/30	1		11:30	X																			
CCB 240-4342/31	1		11:30	X																			
ZZZZZZ			11:30																				
ZZZZZZ			11:30																				
ZZZZZZ			11:30																				
ZZZZZZ			11:30																				
ZZZZZZ			11:30																				
ZZZZZZ			13:38																				
CCVH 240-4356/24-A	1		13:38	X																			
CCV 240-4342/39			13:38																				
CCB 240-4342/40			13:38																				
ZZZZZZ			13:38																				

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Instrument ID: SAURON Method: 9012A

Start Date: 06/10/2011 11:30 End Date: 06/10/2011 13:38

Prep Types
T = Total/NA

TestAmerica Laboratory
Konelab 250 SAURON

Date : 2011-06-09
Time : 15.02

SW846-9012A,335.2,335.4,335.2CLPM,4500CNE,I,G
365.1,365,2,4500PE,325.2,4500CLE,SW846-9251,375.

Test Cyanide
Unit mg/l

Sample ID:	Result	Dilut	Man.dilut	Resp.	Date and Time
CCV-CN	0.0975			0.080	2011-06-09 12.41
CCB-CN	0.0008			0.003	2011-06-09 12.41
MB 240-4179/1-A	0.0014			0.004	2011-06-09 12.41
LCS 240-4179/2-A	0.0862			0.071	2011-06-09 12.41
240-841-L-1-A	0.0088			0.010	2011-06-09 12.41
240-866-A-1-A	0.0144			0.014	2011-06-09 12.41
CCV-CN	0.0974			0.080	2011-06-09 12.46
CCB-CN	0.0008			0.003	2011-06-09 12.46
240-759-A-1-A	0.0026			0.005	2011-06-09 12.47
240-759-A-3-A	0.0121			0.012	2011-06-09 12.47
240-759-A-6-A	0.0098			0.010	2011-06-09 12.47
240-759-A-6-B MS	0.0825			0.068	2011-06-09 12.47
240-759-A-6-C MS	0.1010			0.083	2011-06-09 12.47
240-850-D-11-A	0.0040			0.006	2011-06-09 12.47
240-850-D-12-A	0.0043			0.006	2011-06-09 12.47
CCV-CN	0.0941			0.078	2011-06-09 12.50
CCB-CN	0.0007			0.003	2011-06-09 12.50
CCV-CN	0.1022			0.084	2011-06-09 12.51
CCB-CN	0.0012			0.004	2011-06-09 12.51
240-850-D-13-A	0.0197			0.018	2011-06-09 12.51
240-850-D-15-A	0.0021			0.004	2011-06-09 12.51
CCVH 240-4179/23	0.2118	1+9.0		0.019	2011-06-09 13.04
CCV-CN	0.1021			0.084	2011-06-09 13.06
CCB-CN	0.0013			0.004	2011-06-09 13.06
240-867-D-1-A	0.0281			0.025	2011-06-09 13.13
240-867-D-2-A	0.0243			0.022	2011-06-09 13.13
240-852-A-1-A	0.0287			0.025	2011-06-09 13.13
240-853-A-3-A	0.0251			0.023	2011-06-09 13.13
240-860-B-3-A	0.0495			0.042	2011-06-09 13.13
240-841-L-4-A	0.1096			0.090	2011-06-09 13.13
240-759-A-2-A	0.0443			0.038	2011-06-09 13.13
240-759-A-4-A	0.0198			0.018	2011-06-09 13.13
240-759-A-5-A	0.0018			0.004	2011-06-09 13.13
CCV-CN	0.1017			0.084	2011-06-09 13.16
CCB-CN	0.0005			0.003	2011-06-09 13.16

TestAmerica Laboratory
Konelab 250 SAURON
SW846-9012A,335.2,335.4,335.2CLPM,4500CNE,I,G
365.1,365,2,4500PE,325.2,4500CLE,SW846-9251,375.

09.06.2011 15:02

Test: Cyanide

Sample Id	Result	Dil. 1 +	Response	Errors
CCV-CN	0.0975	0.0	0.080	
CCB-CN	0.0008	0.0	0.003	
MB 240-4179/1-A	0.0014	0.0	0.004	
LCS 240-4179/2-A	0.0862	0.0	0.071	
240-867-D-1-A	0.0283	0.0	0.025	
240-867-D-2-A	0.0242	0.0	0.022	
240-852-A-1-A	0.0293	0.0	0.026	
240-853-A-3-A	0.0311	0.0	0.027	
240-860-B-3-A	0.0475	0.0	0.040	
240-841-L-1-A	0.0088	0.0	0.010	
240-841-L-4-A	0.1053	0.0	0.086	
240-866-A-1-A	0.0144	0.0	0.014	
CCV-CN	0.0974	0.0	0.080	
CCB-CN	0.0008	0.0	0.003	
240-759-A-1-A	0.0026	0.0	0.005	
240-759-A-2-A	0.0458	0.0	0.039	
240-759-A-3-A	0.0121	0.0	0.012	
240-759-A-4-A	0.0249	0.0	0.022	
240-759-A-5-A	0.0029	0.0	0.005	
240-759-A-6-A	0.0098	0.0	0.010	
240-759-A-6-B MS	0.0825	0.0	0.068	
240-759-A-6-C MS	0.1010	0.0	0.083	
240-850-D-11-A	0.0040	0.0	0.006	
240-850-D-12-A	0.0043	0.0	0.006	
CCV-CN	0.0941	0.0	0.078	
CCB-CN	0.0007	0.0	0.003	
CCV-CN	0.1022	0.0	0.084	
CCB-CN	0.0012	0.0	0.004	
240-850-D-13-A	0.0197	0.0	0.018	
240-850-D-15-A	0.0021	0.0	0.004	
CCVH 240-4179/23	0.2116	0.0	0.171	Dil. limit high
CCVL 240-4179/24	0.1509	0.0	0.123	
CCVH 240-4179/23	0.2118	9.0	0.019	
CCV-CN	0.1021	0.0	0.084	
CCB-CN	0.0013	0.0	0.004	
240-867-D-1-A	0.0281	0.0	0.025	
240-867-D-2-A	0.0243	0.0	0.022	
240-852-A-1-A	0.0287	0.0	0.025	
240-853-A-3-A	0.0251	0.0	0.023	
240-860-B-3-A	0.0495	0.0	0.042	
240-841-L-4-A	0.1096	0.0	0.090	
240-759-A-2-A	0.0443	0.0	0.038	
240-759-A-4-A	0.0198	0.0	0.018	
240-759-A-5-A	0.0018	0.0	0.004	
CCVL 240-4179/24	0.1547	0.0	0.126	
CCV-CN	0.1017	0.0	0.084	
CCB-CN	0.0005	0.0	0.003	

TestAmerica Laboratory
Konelab 250 SAURON
SW846-9012A,335.2,335.4,335.2CLPM,4500CNE,I,G
365.1,365,2,4500PE,325.2,4500CLE,SW846-9251,375.

09.06.2011 15:02

Test: Cyanide

Sample Id	Result	Dil. 1 +	Response

N	35
Mean	0.0500
SD	0.05774
CV%	115.58

TestAmerica Laboratory
Konelab 250 SAURON
SW846-9012A,335.2,335.4,335.2CLPM,4500CNE,I,G
365.1,365,2,4500PE,325.2,4500CLE,SW846-9251,375.

09.06.2011 11:26

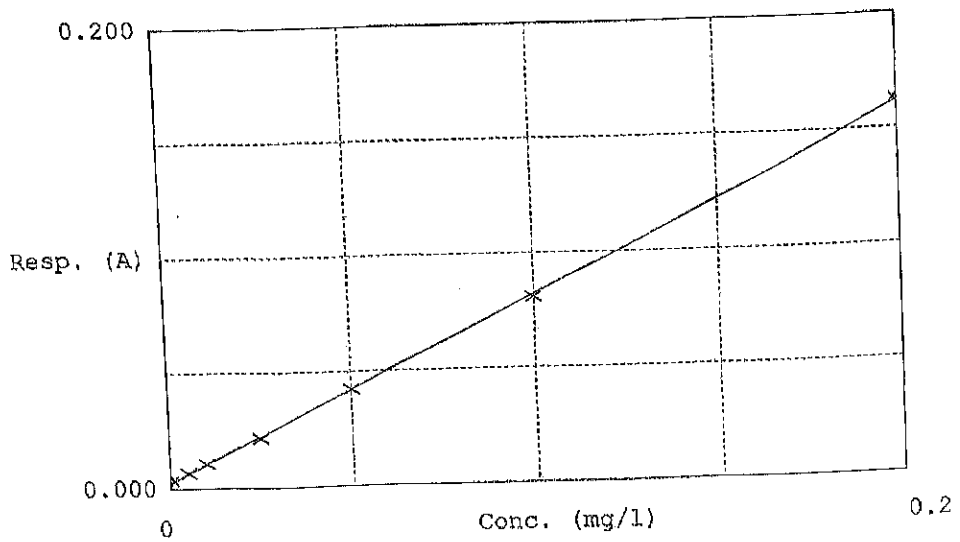
Test Cyanide

Accepted 09.06.2011 08:28

Factor 1.257
Bias 0.003

Coeff. of det. 0.999788

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	CN-0	0.004	0.00122	0.00000	
2	CN-0.2	0.007	0.00532	0.00500	
3	CN-0.2	0.011	0.01027	0.01000	
4	CN-0.2	0.022	0.02398	0.02500	
5	CN-0.2	0.042	0.04996	0.05000	
6	CN-0.2	0.081	0.09826	0.10000	
7	CN-0.2	0.163	0.20098	0.20000	

TestAmerica Laboratory
Konelab 250 SAURON

Date : 2011-06-10
Time : 13.24

SW846-9012A,335.2,335.4,335.2CLPM,4500CNE,I,G
365.1,365,2,4500PE,325.2,4500CLE,SW846-9251,375.

Test Cyanide
Unit mg/l

Sample ID:	Result	Dilut	Man.dilut	Resp.	Date and Time
A-ICV	0.0945			0.076	2011-06-10 11.57
B-ICB	-0.0026			0.002	2011-06-10 11.58
C-MRL	0.0034			0.007	2011-06-10 11.58
CCV-CN	0.1011			0.081	2011-06-10 12.57
CCB-CN	-0.0026			0.002	2011-06-10 12.57
MB 240-4356/1-A	0.0008			0.005	2011-06-10 12.57
240-841-L-4-B	0.0058			0.009	2011-06-10 12.57
240-866-A-1-B	0.0072			0.010	2011-06-10 12.57
240-759-A-2-B	-0.0004			0.004	2011-06-10 12.57
CCV-CN	0.1020			0.081	2011-06-10 13.03
CCB-CN	-0.0026			0.002	2011-06-10 13.03
240-759-A-3-B	-0.0007			0.004	2011-06-10 13.03
240-759-A-4-B	-0.0003			0.004	2011-06-10 13.03
240-850-D-13-B	-0.0011			0.004	2011-06-10 13.03
240-890-E-6-A	0.0187			0.019	2011-06-10 13.03
240-890-E-7-A	0.0190			0.019	2011-06-10 13.03
240-886-D-1-A	0.0018			0.006	2011-06-10 13.03
240-886-D-2-A	0.0004			0.005	2011-06-10 13.03
240-886-D-3-A	0.0003			0.005	2011-06-10 13.03
240-886-D-5-A	0.0008			0.005	2011-06-10 13.03
CCV-CN	0.1018			0.081	2011-06-10 13.08
CCB-CN	-0.0021			0.003	2011-06-10 13.08
240-886-J-6-A	0.0006			0.005	2011-06-10 13.08
240-886-J-6-B MS	0.0879			0.071	2011-06-10 13.08
240-886-J-6-C MS	0.0857			0.069	2011-06-10 13.08
CCVL 240-4356/25	0.0514			0.043	2011-06-10 13.08
CCV-CN	0.1010			0.081	2011-06-10 13.10
CCB-CN	-0.0008			0.004	2011-06-10 13.10
LCS 240-4356/2-A	0.9051	1+9.0		0.073	2011-06-10 13.11
CCV-CN	0.1063			0.085	2011-06-10 13.13
CCB-CN	-0.0025			0.003	2011-06-10 13.13
240-867-D-1-B	0.0291			0.026	2011-06-10 13.21
240-867-D-2-B	0.0304			0.027	2011-06-10 13.21
240-852-B-1-A	0.0280			0.026	2011-06-10 13.21
X 240-852-A-3-A	0.0271X	w/D sample dq not report BR 6/10/11		0.025	2011-06-10 13.21
240-860-A-3-A	0.0452			0.038	2011-06-10 13.21
240-886-D-4-A	0.0809			0.065	2011-06-10 13.21
CCVH 240-4356/24	0.1912	1+9.0		0.019	2011-06-10 13.23
CCV-CN	0.1086			0.086	2011-06-10 13.24
CCB-CN	-0.0001			0.004	2011-06-10 13.24

TestAmerica Laboratory
Konelab 250 SAURON
SW846-9012A,335.2,335.4,335.2CLPM,4500CNE,I,G
365.1,365,2,4500PE,325.2,4500CLE,SW846-9251,375.

10.06.2011 13:24

Test: Cyanide

Sample Id	Result	Dil. 1 +	Response	Errors
A-ICV	0.0945	0.0	0.076	
B-ICB	-0.0026	0.0	0.002	
C-MRL	0.0034	0.0	0.007	
CCV-CN	0.1011	0.0	0.081	
CCB-CN	-0.0026	0.0	0.002	
MB 240-4356/1-A	0.0008	0.0	0.005	
LCS 240-4356/2-A	0.8611	0.0	0.654	Dil. limit high
240-867-D-1-B	0.0280	0.0	0.025	
240-867-D-2-B	0.0286	0.0	0.026	
240-852-B-1-A	0.0256	0.0	0.024	
240-852-A-3-A	0.0245	0.0	0.023	
240-860-A-3-A	0.0446	0.0	0.038	
240-841-L-4-B	0.0058	0.0	0.009	
240-866-A-1-B	0.0072	0.0	0.010	
240-759-A-2-B	-0.0004	0.0	0.004	
CCV-CN	0.1020	0.0	0.081	
CCB-CN	-0.0026	0.0	0.002	
240-759-A-3-B	-0.0007	0.0	0.004	
240-759-A-4-B	-0.0003	0.0	0.004	
240-850-D-13-B	-0.0011	0.0	0.004	
240-890-E-6-A	0.0187	0.0	0.019	
240-890-E-7-A	0.0190	0.0	0.019	
240-886-D-1-A	0.0018	0.0	0.006	
240-886-D-2-A	0.0004	0.0	0.005	
240-886-D-3-A	0.0003	0.0	0.005	
240-886-D-4-A	0.0769	0.0	0.062	
240-886-D-5-A	0.0008	0.0	0.005	
CCV-CN	0.1018	0.0	0.081	
CCB-CN	-0.0021	0.0	0.003	
240-886-J-6-A	0.0006	0.0	0.005	
240-886-J-6-B MS	0.0879	0.0	0.071	
240-886-J-6-C MS	0.0857	0.0	0.069	
CCVH 240-4356/24	0.2072	0.0	0.161	Dil. limit high
CCVL 240-4356/25	0.0514	0.0	0.043	
CCVL 240-4356/26	0.0652	0.0	0.054	
CCV-CN	0.1010	0.0	0.081	
CCB-CN	-0.0008	0.0	0.004	
LCS 240-4356/2-A	0.9051	9.0	0.073	
CCV-CN	0.1063	0.0	0.085	
CCB-CN	-0.0025	0.0	0.003	
240-867-D-1-B	0.0291	0.0	0.026	
240-867-D-2-B	0.0304	0.0	0.027	
240-852-B-1-A	0.0280	0.0	0.026	
240-852-A-3-A	0.0271	0.0	0.025	
240-860-A-3-A	0.0452	0.0	0.038	
240-886-D-4-A	0.0809	0.0	0.065	
CCVH 240-4356/24	0.1912	9.0	0.019	
CCV-CN	0.1086	0.0	0.086	
CCB-CN	-0.0001	0.0	0.004	

TestAmerica Laboratory
Konelab 250 SAURON
SW846-9012A,335.2,335.4,335.2CLPM,4500CNE,I,G
365.1,365,2,4500PE,325.2,4500CLE,SW846-9251,375.

10.06.2011 13:24

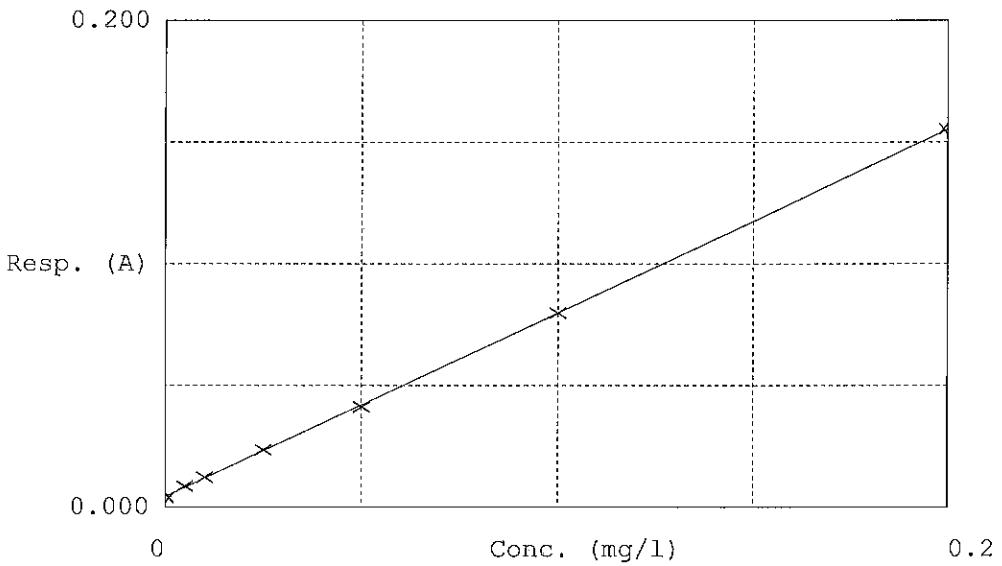
Test Cyanide

Accepted 10.06.2011 12:19

Factor 1.327
Bias 0.004

Coeff. of det. 0.999917

Errors



	Calibrator	Response	Calc. con.	Conc.	Errors
1	CN-0	0.004	-0.00062	0.00000	
2	CN-0.2	0.009	0.00569	0.00500	
3	CN-0.2	0.012	0.01044	0.01000	
4	CN-0.2	0.024	0.02545	0.02500	
5	CN-0.2	0.041	0.04885	0.05000	
6	CN-0.2	0.080	0.10000	0.10000	
7	CN-0.2	0.155	0.20019	0.20000	
8	A-ICV(control)	0.076	0.09448	0.10000	
9	B-ICB(control)	0.002	-0.00260	0.00000	
10	C-MRL(control)	0.007	0.00338	0.00500	

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Batch Number: 4179 Batch Start Date: 06/09/11 11:10 Batch Analyst: Henry, Kyle

Batch Method: 9012A Batch End Date: 06/09/11 12:10

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	DistillpHCheck	SulfideCheck	ChlorineCheck	WCCN10PPM1 00010
MB 240-4179/1		9012A, 9012A		50 mL	25 mL	>12	no	no	
LCS 240-4179/2		9012A, 9012A		50 mL	25 mL	>12	no	no	
240-759-A-1	MW-203B(053111)	9012A, 9012A	T	50 mL	25 mL	>12	no	no	
240-759-A-5	EB-1(053111)-TP	9012A, 9012A	T	50 mL	25 mL	>12	no	no	
240-759-A-6	MW-206B(053111)	9012A, 9012A	T	50 mL	25 mL	>12	no	no	
240-759-A-6 MS	MW-206B(053111)	9012A, 9012A	T	50 mL	25 mL	>12	no	no	
240-759-A-6 MSD	MW-206B(053111)	9012A, 9012A	T	50 mL	25 mL	>12	no	no	
CCVH 240-4179/23		9012A, 9012A		50 mL	25 mL	>12	no	no	0.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	WCCN1PPMMSD2 00011	WCCNBLOCKA 00001	WCCNBLOCKB 00001	WCCNBLOCKC 00001	WCCNLCS 00003	WCH2SO4 00005
MB 240-4179/1		9012A, 9012A			1 mL				2.5 mL
LCS 240-4179/2		9012A, 9012A			2 mL			5 mL	2.5 mL
240-759-A-1	MW-203B(053111)	9012A, 9012A	T			1 mL			2.5 mL
240-759-A-5	EB-1(053111)-TP	9012A, 9012A	T			5 mL			2.5 mL
240-759-A-6	MW-206B(053111)	9012A, 9012A	T			6 mL			2.5 mL
240-759-A-6 MS	MW-206B(053111)	9012A, 9012A	T	2 mL		7 mL			2.5 mL
240-759-A-6 MSD	MW-206B(053111)	9012A, 9012A	T	2 mL		8 mL			2.5 mL
CCVH 240-4179/23		9012A, 9012A					3 mL		2.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	WCMGCL 00001	WCSULFAMIC 00004				
MB 240-4179/1		9012A, 9012A		2 mL	2 mL				
LCS 240-4179/2		9012A, 9012A		2 mL	2 mL				
240-759-A-1	MW-203B(053111)	9012A, 9012A	T	2 mL	2 mL				
240-759-A-5	EB-1(053111)-TP	9012A, 9012A	T	2 mL	2 mL				
240-759-A-6	MW-206B(053111)	9012A, 9012A	T	2 mL	2 mL				
240-759-A-6 MS	MW-206B(053111)	9012A, 9012A	T	2 mL	2 mL				
240-759-A-6 MSD	MW-206B(053111)	9012A, 9012A	T	2 mL	2 mL				
CCVH 240-4179/23		9012A, 9012A		2 mL	2 mL				

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Batch Number: 4179 Batch Start Date: 06/09/11 11:10 Batch Analyst: Henry, Kyle

Batch Method: 9012A Batch End Date: 06/09/11 12:10

Batch Notes	
Distillation Temperature	125 Degrees C
Magnesium Chloride Reagent ID Number	011519
Sodium Hydroxide Reagent ID Number	011177
Sulfamic Acid Reagent ID Number	015305
Sulfuric Acid Reagent ID Number	047911

Basis	Basis Description
T	Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Batch Number: 4249 Batch Start Date: 06/09/11 12:41 Batch Analyst: Henry, Kyle

Batch Method: 9012A Batch End Date: 06/09/11 13:16

Lab Sample ID	Client Sample ID	Method Chain	Basis	WCCN.1CCV1 00010					
CCV 240-4249/1		9012A		4 mL					
CCV 240-4249/7		9012A		4 mL					
CCV 240-4249/16		9012A		4 mL					
CCV 240-4249/23		9012A		4 mL					
CCV 240-4249/34		9012A		4 mL					

Batch Notes	
Chloramine-T Reagent ID Number	1023024
Pyridine-Barbituric Acid Reagent ID	1012194
Titrant or buffer	1021518

Basis	Basis Description

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Batch Number: 4342 Batch Start Date: 06/10/11 11:30 Batch Analyst: Rohr, Ben

Batch Method: 9012A Batch End Date: 06/10/11 13:38

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WCCN.005MRL1 00011	WCCN.1CCV1 00010	WCCN.1ICV2 00010	
ICV 240-4342/1		9012A		2 mL	2 mL			2 mL	
ICB 240-4342/2		9012A		2 mL	2 mL				
MRL 240-4342/3		9012A		2 mL	2 mL	2 mL			
CCV 240-4342/4		9012A		2 mL	2 mL		2 mL		
CCB 240-4342/5		9012A		2 mL	2 mL				
MB 240-4356/1-A		9012A		2 mL	2 mL				
240-759-A-2-B	FD-1(053111)-TP	9012A	T	2 mL	2 mL				
CCV 240-4342/10		9012A		2 mL	2 mL		2 mL		
CCB 240-4342/11		9012A		2 mL	2 mL				
240-759-A-3-B	MW-202B(053111)	9012A	T	2 mL	2 mL				
240-759-A-4-B	MW-201B(053111)	9012A	T	2 mL	2 mL				
CCV 240-4342/21		9012A		2 mL	2 mL		2 mL		
CCB 240-4342/22		9012A		2 mL	2 mL				
CCVL 240-4356/25-A		9012A		2 mL	2 mL				
CCV 240-4342/27		9012A		2 mL	2 mL		2 mL		
CCB 240-4342/28		9012A		2 mL	2 mL				
LCS 240-4356/2-A		9012A		2 mL	2 mL				
CCV 240-4342/30		9012A		2 mL	2 mL		2 mL		
CCB 240-4342/31		9012A		2 mL	2 mL				
CCVH 240-4356/24-A		9012A		2 mL	2 mL				

Batch Notes	
Buffer Reagent ID Number	1021518
Chloramine-T Reagent ID Number	1023024
Sodium Hydroxide Reagent ID Number	11177
Pyridine-Barbituric Acid Reagent ID	1012194

Basis	Basis Description
T	Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica North Canton Job No.: 240-759-1

SDG No.:

Batch Number: 4356 Batch Start Date: 06/10/11 11:30 Batch Analyst: Rohr, Ben

Batch Method: 9012A Batch End Date: 06/10/11 12:30

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WCCN10PPM1 00010	WCCNBLOCKA 00001	WCCNBLOCKB 00001	WCCNBLOCKC 00001
MB 240-4356/1		9012A, 9012A		50 mL	25 mL				
LCS 240-4356/2		9012A, 9012A		50 mL	25 mL		1 mL		
240-759-A-2	FD-1(053111)-TP	9012A, 9012A	T	50 mL	25 mL		9 mL		
240-759-A-3	MW-202B(053111)	9012A, 9012A	T	50 mL	25 mL		10 mL		
240-759-A-4	MW-201B(053111)	9012A, 9012A	T	50 mL	25 mL			1 mL	
CCVH 240-4356/24		9012A, 9012A		50 mL	25 mL	0.5 mL			3 mL
CCVL 240-4356/25		9012A, 9012A		50 mL	25 mL	0.125 mL			4 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	WCCNLCS 00003					
MB 240-4356/1		9012A, 9012A							
LCS 240-4356/2		9012A, 9012A		50 mL					
240-759-A-2	FD-1(053111)-TP	9012A, 9012A	T						
240-759-A-3	MW-202B(053111)	9012A, 9012A	T						
240-759-A-4	MW-201B(053111)	9012A, 9012A	T						
CCVH 240-4356/24		9012A, 9012A							
CCVL 240-4356/25		9012A, 9012A							

Batch Notes	
Distillation Temperature	125 Degrees C
Magnesium Chloride Lot Number	11518
Sodium Hydroxide Reagent ID Number	011177
Sulfamic Acid Reagent ID Number	15304
Sulfuric Acid Reagent ID Number	47911

Basis	Basis Description
T	Total/NA

Shipping and Receiving Documents

Chain of Custody Record

TestAmerica Laboratory location: North Canton, OH

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

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TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ARCADIS	Client Project Manager: Sarah Fisher	Site Contact:	Lab Contact: Denise Pohl	COC No: 016550
Address: 251 E Ohio St. Ste. 800	Telephone: 317 231 6500	Telephone:	Telephone:	1 of 1 COCs
City/State/Zip: Indianapolis, IN 46204	Email: SFisher@arcadis-us.com	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone: 317 231 6500		TAT if different from below STD		Walk-in client ☐ Lab pickup ☐ Lab sampling ☐
Project Name: Rolls Royce	Method of Shipment/Carrier: FedEx	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Job/SDG No:
Project Number: IN000297.0020	Shipping/Tracking No:			
PO #				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	Cyanide - 9012A	Dissolved Metals *	Sample Specific Notes / Special Instructions:
MW-203B (053111)	5/31/11	1300		X					1X			1X			1/2	G	X	X	
FD-1 (053111)-TP		—		X					1			1					X	X	Field Duplicate
MW-202B (053111)		1430		X					1			1					X	X	
MW-201B (053111)		1545		X					1			1					X	X	
EB-1 (053111)-TP		1600		X					1			1					X	X	
MW-206B (053111)		1700		X					3			3			2		X	X	MS/MSD
	TR	5/31/11																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

* Samples for Dissolved Metals analysis have been FIELD FILTERED ** Level IV QA/QC Data Pack

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Tim Porter / TP	ARCADIS	5/31/11 1900			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			Terry Burns	TA	6/1/11 950

TestAmerica Cooler Receipt Form/Narrative **Lot Number:** 240-759
North Canton Facility

Client Arcadis Project Rolls Royce By: Jerry Burns
Cooler Received on 6/1/11 Opened on 6/1/11 (Signature)
FedEx ☒ UPS ☐ DHL ☐ FAS ☐ Stetson ☐ Client Drop Off ☐ TestAmerica Courier ☐ Other
TestAmerica Cooler # 285 Multiple Coolers ☐ Foam Box ☐ Client Cooler ☐ Other

1. Were custody seals on the outside of the cooler(s)? Yes ☒ No ☐ Intact? Yes ☒ No ☐ NA ☐
   If YES, Quantity 1 Quantity Unsalvageable
   Were custody seals on the outside of cooler(s) signed and dated? Yes ☒ No ☐ NA ☐
   Were custody seals on the bottle(s)? Yes ☐ No ☒
   If YES, are there any exceptions?
2. Shippers' packing slip attached to the cooler(s)? Yes ☒ No ☐
3. Did custody papers accompany the sample(s)? Yes ☒ No ☐ Relinquished by client? Yes ☒ No ☐
4. Were the custody papers signed in the appropriate place? Yes ☒ No ☐
5. Packing material used: Bubble Wrap ☐ Foam ☐ None ☒ Other
6. Cooler temperature upon receipt 1.2 °C See back of form for multiple coolers/temps ☐
   METHOD: IR ☒ Other ☐
   COOLANT: Wet Ice ☒ Blue Ice ☐ Dry Ice ☐ Water ☐ None ☐
7. Did all bottles arrive in good condition (Unbroken)? Yes ☒ No ☐
8. Could all bottle labels be reconciled with the COC? Yes ☒ No ☐
9. Were sample(s) at the correct pH upon receipt? Yes ☒ No ☐ NA ☐
10. Were correct bottle(s) used for the test(s) indicated? Yes ☒ No ☐
11. Were air bubbles >6 mm in any VOA vials? Yes ☐ No ☐ NA ☒
12. Sufficient quantity received to perform indicated analyses? Yes ☒ No ☐
13. Was a trip blank present in the cooler(s)? Yes ☐ No ☒ Were VOAs on the COC? Yes ☐ No ☒

Contacted PM Date by via Verbal ☐ Voice Mail ☐ Other ☐
Concerning

14. CHAIN OF CUSTODY

The following discrepancies occurred:

15. SAMPLE CONDITION

Sample(s) were received after the recommended holding time had expired.
Sample(s) were received in a broken container.
Sample(s) were received with bubble >6 mm in diameter. (Notify PM)

16. SAMPLE PRESERVATION

Sample(s) were further preserved in Sample Receiving to meet recommended pH level(s). *Nitric Acid Lot#* 100110-HNO_3; *Sulfuric Acid Lot#* 110410-H_2SO_4; *Sodium Hydroxide Lot#* 100108 -*NaOH; Hydrochloric Acid Lot#* 092006-*HCl; Sodium Hydroxide and Zinc Acetate Lot#* 100108-$(CH_3COO)_2ZN$/*NaOH*. What time was preservative added to sample(s)?

Client ID	pH	Date	Initials
203B	<2, >12	6/1/11	JB
FD-1	<2, >12	"	"
202B	<2, >12	"	"
201B	<2, >12	"	"
EB-1	<2, >12	"	"
206B	<2 <2 <2, >12, >12, >12	"	"

TestAmerica Cooler Receipt Form/Narrative
North Canton Facility

Client ID	pH	Date	Initials

Cooler #	Temp. °C	Method	Coolant

Discrepancies Cont'd:

Login Sample Receipt Checklist

Client: ARCADIS U.S., Inc.

Job Number: 240-759-1

Login Number: 759

List Source: TestAmerica North Canton

List Number: 1

Creator: Burns, Terry

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	1.2
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

ARCADIS
Infrastructure · Water · Environment · Buildings

Imagine the result

Former AGT Surface Impoundment

Data Review

INDIANAPOLIS, INDIANA

Total and Dissolved Metals Analyses

SDG #240-759-1

Analyses Performed By:
TestAmerica Laboratories
North Canton, Ohio

Report #14398R
Review Level: Tier II
Project: IN000297.2011.00001

SUMMARY

This data quality assessment summarizes the review of Sample Delivery Group (SDG) #240-759-1 for samples collected in association with the Former AGT Surface Impoundment site. The review was conducted as a Tier II evaluation and included review of data package completeness. Only analytical data associated with constituents of concern were reviewed for this validation. Field documentation was not included in this review. Included with this assessment are the validation annotated sample result sheets, and chain of custody. Analyses were performed on the following samples:

Sample ID	Lab ID	Matrix	Sample Collection Date	Parent Sample	Analysis				
					VOC	TPH/ GRO	PCB	MET	MISC
EB-1(053111)-TP	240-759-5	Water	5/31/2011					X	X
FD-1(053111)-TP	240-759-2	Water	5/31/2011	MW-203B(053111)				X	X
MW-201B(053111)	240-759-4	Water	5/31/2011					X	X
MW-202B(053111)	240-759-3	Water	5/31/2011					X	X
MW-203B(053111)	240-759-1	Water	5/31/2011					X	X
MW-206B(053111)	240-759-6	Water	5/31/2011					X	X

Notes:

1. The matrix spike/matrix spike duplicate (MS/MSD) analysis was performed on sample location MW-206B(053111).

ANALYTICAL DATA PACKAGE DOCUMENTATION

The table below is the evaluation of the data package completeness.

Items Reviewed	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
1. Sample receipt condition		X		X	
2. Requested analyses and sample results		X		X	
3. Master tracking list		X		X	
4. Methods of analysis		X		X	
5. Reporting limits		X		X	
6. Sample collection date		X		X	
7. Laboratory sample received date		X		X	
8. Sample preservation verification (as applicable)		X		X	
9. Sample preparation/extraction/analysis dates		X		X	
10. Fully executed Chain-of-Custody (COC) form		X		X	
11. Narrative summary of QA or sample problems provided		X		X	
12. Data Package Completeness and Compliance		X		X	

QA - Quality Assurance

INORGANIC ANALYSIS INTRODUCTION

Analyses were performed according to United States Environmental Protection Agency (USEPA) Method SW-846 Methods 6000/7000 and 9012. Data were reviewed in accordance with USEPA National Functional Guidelines of July 2002.

The data review process is an evaluation of data on a technical basis rather than a determination of contract compliance. As such, the standards against which the data are being weighed may differ from those specified in the analytical method. It is assumed that the data package represents the best efforts of the laboratory and that it was already subjected to adequate and sufficient quality review prior to submission.

During the review process, laboratory qualified and unqualified data are verified against the supporting documentation. Based on this evaluation, qualifier codes may be added, deleted, or modified by the data reviewer. Results are qualified with the following codes in accordance with the USEPA National Functional Guidelines:

- Concentration (C) Qualifiers

    U The analyte was analyzed for but not detected. The associated value is the analyte instrument detection limit.

    B The reported value was obtained from a reading less than the contract-required detection limit (CRDL), but greater than or equal to the instrument detection limit (IDL).

- Quantitation (Q) Qualifiers

    E The reported value is estimated due to the presence of interference.

    N Spiked sample recovery is not within control limits.

    * Duplicate analysis is not within control limits.

- Validation Qualifiers

    J The analyte was positively identified; however, the associated numerical value is an estimated concentration only.

    UJ The analyte was not detected above the reported sample detection limit. However, the reported limit is approximate and may or may not represent the actual limit of detection.

    UB Analyte considered non-detect at the listed value due to associated blank contamination.

    R The sample results are rejected.

Two facts should be noted by all data users. First, the "R" flag means that the associated value is unusable. In other words, due to significant quality control (QC) problems, the analysis is invalid and provides no information as to whether the compound is present or not. "R" values should not appear on data tables because they cannot be relied upon, even as a last resort. The second fact to keep in mind is that no compound concentration, even if it has passed all QC tests, is guaranteed to be accurate. Strict QC serves to increase confidence in data but any value potentially contains error.

METALS ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
SW-846 6010B	Water	180 days from collection to analysis	Cool to 4°C±2°C; preserved to a pH of less than 2.
	Soil	180 days from collection to analysis	Cool to 4°C±2°C.
SW-846 7470	Water	28 days from collection to analysis	Cool to 4°C±2°C; preserved to a pH of less than 2.
SW-846 7471	Soil	28 days from collection to analysis	Cool to 4°C±2°C.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

All analytes associated with the QA blanks exhibited a concentration less than the MDL, with the exception of the analytes listed in the following table. Sample results associated with QA blank contamination that were greater than the BAL resulted in the removal of the laboratory qualifier (J) of data. Sample results less than the BAL associated with the following sample locations were qualified as listed in the following table.

Sample Locations	Analytes	Sample Result	Qualification
MW-201B(053111)	Arsenic	Detected sample results <RL and <BAL	"UB" at the RL
MW-202B(053111)	Chromium		

RL = reporting limit

3. Calibration

Satisfactory instrument calibration is established to provide that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the

instrument's continuing performance is satisfactory.

3.1 Initial Calibration and Continuing Calibration

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 for all non-ICP analytes and all initial calibration verification standard recoveries were within control limits.

All continuing calibration verification standard recoveries were within the control limit.

3.2 CRDL Check Standard

The CRDL check standard serves to verify the linearity of calibration of the analysis at the CRDL. The CRDL standard is not required for the analysis of aluminum (Al), barium (Ba), calcium (Ca), iron (Fe), magnesium (Mg), sodium (Na), and potassium (K). The criteria used to evaluate the CRDL standard analysis are presented below in the CRDL standards evaluation table.

All CRDL standard recoveries were within control limits.

3.3 ICP Interference Control Sample (ICS)

The ICS verifies the laboratories interelement and background correction factors.

All ICS exhibited recoveries within the control limits.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.1 MS/MSD Analysis

All metal analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS performed on sample locations where the analyte's concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory flag will be removed.

The MS/MSD analysis exhibited recoveries within the control limits.

4.2 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the CRDL. A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the CRDL, a control limit of one times the CRDL is applied for water matrices and two times the CRDL for soil matrices.

MS/MSD analysis was performed in replacement of the laboratory duplicate analysis. The MS/MSD recoveries exhibited acceptable RPD.

5. Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
MW-203B(053111)/ FD-1(053111)-TP	Barium (dissolved)	30 J	32 J	AC

AC = Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

6. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

7. Serial Dilution

The serial dilution analysis is used to assess if a significant physical or chemical interference exists due to sample matrix. Analytes exhibiting concentrations greater than 50 times the MDL in the undiluted sample are evaluated to determine if matrix interference exists. These analytes are required to have less than a 10% difference (%D) between sample results from the undiluted (parent) sample and results associated with the same sample analyzed with a five-fold dilution.

The serial dilution analysis was not performed on a sample location within this SDG.

8. System Performance and Overall Assessment

Only dissolved metals were performed associated with methods SW-846 6000/7000; therefore, evaluation of total versus dissolved was not evaluated within this SDG.

Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR METAL

METALS; SW-846 6000/7000	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Inductively Coupled Plasma-Atomic Emission Spectrometry (ICP) Atomic Absorption – Manual Cold Vapor (CV)					
Tier II Validation					
Holding Times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Instrument Blanks		X	X		
B. Method Blanks		X		X	
C. Equipment/Field Blanks		X		X	
Laboratory Control Sample (LCS)		X		X	
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate (MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
ICP Serial Dilution					X
Reporting Limit Verification		X		X	
Raw Data		X		X	
Tier III Validation					
Initial Calibration Verification		X		X	
Continuing Calibration Verification		X		X	
CRDL Standard		X		X	
ICP Interference Check		X		X	
Transcription/calculation errors present		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%R Percent recovery
RPD Relative percent difference

GENERAL CHEMISTRY ANALYSES

1. Holding Times

The specified holding times for the following methods are presented in the following table.

Method	Matrix	Holding Time	Preservation
Cyanide by SW-846 9012	Water	14 days from collection to analysis	Cool to 4°C+2°C; preserved to a pH of greater than 12.
	Soil		Cool to 4°C+2°C.

All samples were analyzed within the specified holding times.

2. Blank Contamination

Quality assurance (QA) blanks (i.e., method and rinse blanks) are prepared to identify any contamination which may have been introduced into the samples during sample preparation or field activity. Method blanks measure laboratory contamination. Rinse blanks measure contamination of samples during field operations.

A blank action level (BAL) of five times the concentration of a detected compound in an associated blank (common laboratory contaminant compounds are calculated at ten times) is calculated for QA blanks containing concentrations greater than the method detection limit (MDL). The BAL is compared to the associated sample results to determine the appropriate qualification of the sample results, if needed.

Analytes were not detected above the MDL in the associated blanks; therefore detected sample results were not associated with blank contamination.

3. Calibration

Satisfactory instrument calibration is established to insure that the instrument is capable of producing acceptable quantitative data. An initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of an experimental sequence. The continuing calibration verifies that the instrument daily performance is satisfactory.

The correct number and type of standards were analyzed. The correlation coefficient of the initial calibration was greater than 0.995 and all initial calibration verification standard recoveries were within control limits.

All calibration standard recoveries were within the control limit.

4. Matrix Spike/Matrix Spike Duplicate (MS/MSD)/Laboratory Duplicate Analysis

MS/MSD and laboratory duplicate data are used to assess the precision and accuracy of the analytical method.

4.3 MS/MSD Analysis

All analytes must exhibit a percent recovery within the established acceptance limits of 75% to 125%. The MS/MSD recovery control limits do not apply for MS/MSD performed on sample locations where the analyte's

concentration detected in the parent sample exceeds the MS/MSD concentration by a factor of four or greater. In instance where this is true, the data will not be qualified even if the percent recovery does not meet the control limits and the laboratory qualifier "N" will be removed.

The MS/MSD analysis exhibited recoveries within the control limits.

4.4 Laboratory Duplicate Analysis

The laboratory duplicate relative percent difference (RPD) criterion is applied when parent and duplicate sample concentrations are greater than or equal to 5 times the CRDL. A control limit of 20% for water matrices and 35% for soil matrices is applied when the criteria above is true. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the CRDL, a control limit of one times the CRDL is applied for water matrices and two times the CRDL for soil matrices.

MS/MSD analysis was performed in replacement of the laboratory duplicate analysis. The MS/MSD recoveries exhibited acceptable RPD.

5.0 Field Duplicate Analysis

Field duplicate analysis is used to assess the precision and accuracy of the field sampling procedures and analytical method. A control limit of 50% for water matrices and 100% for soil matrices is applied to the RPD between the parent sample and the field duplicate. In the instance when the parent and/or duplicate sample concentrations are less than or equal to 5 times the RL, a control limit of two times the RL is applied for water matrices or three times the RL is applied for soil matrices.

Results for duplicate samples are summarized in the following table.

Sample ID/Duplicate ID	Analyte	Sample Result	Duplicate Result	RPD
MW-203B(053111)/ FD-1(053111)-TP	Cyanide, Total	0.010 U	0.010 U	AC

AC = Acceptable

The calculated RPDs between the parent sample and field duplicate were acceptable.

6. Laboratory Control Sample (LCS) Analysis

The LCS analysis is used to assess the precision and accuracy of the analytical method independent of matrix interferences. The analytes associated with the LCS analysis must exhibit a percent recovery between the control limits of 80% and 120%.

The LCS analysis exhibited recoveries within the control limits.

7. System Performance and Overall Assessment

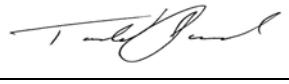
Overall system performance was acceptable. Other than for those deviations specifically mentioned in this review, the overall data quality is within the guidelines specified in the method.

DATA VALIDATION CHECKLIST FOR GENERAL CHEMISTRY

General Chemistry: EPA XXXX	Reported		Performance Acceptable		Not Required
	No	Yes	No	Yes	
Miscellaneous Instrumentation					
Tier II Validation					
Holding times		X		X	
Reporting limits (units)		X		X	
Blanks					
A. Method blanks		X		X	
B. Equipment blanks		X		X	
Laboratory Control Sample (LCS) %R		X		X	
Matrix Spike (MS) %R		X		X	
Matrix Spike Duplicate(MSD) %R		X		X	
MS/MSD Precision (RPD)		X		X	
Field/Lab Duplicate (RPD)		X		X	
Dilution Factor		X		X	
Moisture Content		X		X	
Tier III Validation					
Initial calibration %RSD or correlation coefficient		X		X	
Continuing calibration %R		X		X	
Raw Data					
Transcription/calculation errors present		X		X	
Reporting limits adjusted to reflect sample dilutions		X		X	

%RSD – relative standard deviation, %R - percent recovery, RPD - relative percent difference, %D – difference

VALIDATION PERFORMED BY: Todd Church

SIGNATURE: 

DATE: July 11, 2011

PEER REVIEW: Dennis Capria

DATE: July 12, 2011

CHAIN OF CUSTODY/
CORRECTED SAMPLE ANALYSIS DATA SHEETS

Chain of Custody Record

TestAmerica Laboratory location: North Canton, OH

Regulatory program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other _____

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

Client Contact				
Company Name: ARCADIS	Client Project Manager: Sarah Fisher	Site Contact:	Lab Contact: Denise Pohl	COC No: 016550
Address: 251 E Ohio St. Ste. 800	Telephone: 317 231 6500	Telephone:	Telephone:	1 of 1 COCs
City/State/Zip: Indianapolis, IN 46204	Email: SFisher@arcadis-us.com	Analysis Turnaround Time (in BUS days)	Analyses	For lab use only
Phone: 317 231 6500		TAT if different from below STD		Walk-in client ☐ Lab pickup ☐ Lab sampling ☐
Project Name: Rolls Royce	Method of Shipment/Carrier: FedEx	☐ 3 weeks ☐ 2 weeks ☐ 1 week ☐ 2 days ☐ 1 day		Job/SDG No:
Project Number: IN000297.0020	Shipping/Tracking No:			
PO #				

Sample Identification	Sample Date	Sample Time	Matrix: Air	Aqueous	Sediment	Solid	Other:	Containers & Preservatives: H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Unpres	Other:	Filtered Sample (Y/N)	Composite=C / Grab=G	Cyanide - 9012A	Dissolved Metals *	Sample Specific Notes / Special Instructions:
MW-203B (053111)	5/31/11	1300		X					1X			1X			1/2	G	X	X	
FD-1 (053111)-TP		—		X					1			1					X	X	Field Duplicate
MW-202B (053111)		1430		X					1			1					X	X	
MW-201B (053111)		1545		X					1			1					X	X	
EB-1 (053111)-TP		1600		X					1			1					X	X	
MW-206B (053111)		1700		X					3			3			2		X	X	MS/MSD
	TR	5/31/11																	

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☐ Disposal By Lab ☐ Archive For _____ Months

Special Instructions/QC Requirements & Comments:

* Samples for Dissolved Metals analysis have been FIELD FILTERED ** Level IV QA/QC Data Pack

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Tim Porter / TP	ARCADIS	5/31/11 1900			
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:
			Terry Burns	TA	6/1/11 950

Client: ARCADIS U.S., Inc.

Job Number: 240-759-1

Client Sample ID: **MW-203B(053111)**

Lab Sample ID: 240-759-1
Client Matrix: Water

Date Sampled: 05/31/2011 1300
Date Received: 06/01/2011 0950

6010B Metals (ICP)-Dissolved

Analysis Method:	6010B	Analysis Batch:	240-6343	Instrument ID:	I5
Prep Method:	3005A	Prep Batch:	240-5513	Lab File ID:	I50627A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2011 1207			Final Weight/Volume:	50 mL
Prep Date:	06/21/2011 1230				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	5.0	U	2.2	5.0
Arsenic	10	U	3.2	10
Barium	30	J	0.67	100
Cadmium	2.0	U	0.66	2.0
Chromium	5.0	U	2.2	5.0
Lead	3.0	U	1.9	3.0
Selenium	5.0	U	4.1	5.0

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-5897	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-5359	Lab File ID:	HG10622A.PRN
Dilution:	1.0			Initial Weight/Volume:	100 mL
Analysis Date:	06/22/2011 1752			Final Weight/Volume:	100 mL
Prep Date:	06/20/2011 1405				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

Client: ARCADIS U.S., Inc.

Job Number: 240-759-1

Client Sample ID: FD-1(053111)-TP

Lab Sample ID: 240-759-2FD
Client Matrix: Water

Date Sampled: 05/31/2011 0000
Date Received: 06/01/2011 0950

6010B Metals (ICP)-Dissolved

Analysis Method:	6010B	Analysis Batch:	240-6343	Instrument ID:	I5
Prep Method:	3005A	Prep Batch:	240-5513	Lab File ID:	I50627A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2011 1213			Final Weight/Volume:	50 mL
Prep Date:	06/21/2011 1230				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	5.0	U	2.2	5.0
Arsenic	10	U	3.2	10
Barium	32	J	0.67	100
Cadmium	2.0	U	0.66	2.0
Chromium	5.0	U	2.2	5.0
Lead	3.0	U	1.9	3.0
Selenium	5.0	U	4.1	5.0

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-5897	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-5359	Lab File ID:	HG10622A.PRN
Dilution:	1.0			Initial Weight/Volume:	100 mL
Analysis Date:	06/22/2011 1753			Final Weight/Volume:	100 mL
Prep Date:	06/20/2011 1405				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

Client: ARCADIS U.S., Inc.

Job Number: 240-759-1

Client Sample ID: **MW-202B(053111)**

Lab Sample ID: 240-759-3
Client Matrix: Water

Date Sampled: 05/31/2011 1430
Date Received: 06/01/2011 0950

6010B Metals (ICP)-Dissolved

Analysis Method:	6010B	Analysis Batch:	240-6343	Instrument ID:	I5
Prep Method:	3005A	Prep Batch:	240-5513	Lab File ID:	I50627A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2011 1230			Final Weight/Volume:	50 mL
Prep Date:	06/21/2011 1230				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	5.0	U	2.2	5.0
Arsenic	10	U	3.2	10
Barium	35	J	0.67	100
Cadmium	2.0	U	0.66	2.0
Chromium	5.0 ~~2.6~~	J+UB	2.2	5.0
Lead	3.0	U	1.9	3.0
Selenium	5.0	U	4.1	5.0

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-5897	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-5359	Lab File ID:	HG10622A.PRN
Dilution:	1.0			Initial Weight/Volume:	100 mL
Analysis Date:	06/22/2011 1755			Final Weight/Volume:	100 mL
Prep Date:	06/20/2011 1405				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

Client: ARCADIS U.S., Inc.

Job Number: 240-759-1

Client Sample ID: **MW-201B(053111)**

Lab Sample ID: 240-759-4
Client Matrix: Water

Date Sampled: 05/31/2011 1545
Date Received: 06/01/2011 0950

6010B Metals (ICP)-Dissolved

Analysis Method:	6010B	Analysis Batch:	240-6343	Instrument ID:	I5
Prep Method:	3005A	Prep Batch:	240-5513	Lab File ID:	I50627A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2011 1235			Final Weight/Volume:	50 mL
Prep Date:	06/21/2011 1230				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	5.0	U	2.2	5.0
Arsenic	10 ~~4.5~~	~~J~~ UB	3.2	10
Barium	11	J	0.67	100
Cadmium	2.0	U	0.66	2.0
Chromium	5.0	U	2.2	5.0
Lead	3.0	U	1.9	3.0
Selenium	5.0	U	4.1	5.0

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-5897	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-5359	Lab File ID:	HG10622A.PRN
Dilution:	1.0			Initial Weight/Volume:	100 mL
Analysis Date:	06/22/2011 1756			Final Weight/Volume:	100 mL
Prep Date:	06/20/2011 1405				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

Client: ARCADIS U.S., Inc.

Job Number: 240-759-1

Client Sample ID: **EB-1(053111)-TP**

Lab Sample ID: 240-759-5
Client Matrix: Water

Date Sampled: 05/31/2011 1600
Date Received: 06/01/2011 0950

6010B Metals (ICP)-Dissolved

Analysis Method:	6010B	Analysis Batch:	240-6343	Instrument ID:	I5
Prep Method:	3005A	Prep Batch:	240-5513	Lab File ID:	I50627A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2011 1241			Final Weight/Volume:	50 mL
Prep Date:	06/21/2011 1230				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	5.0	U	2.2	5.0
Arsenic	10	U	3.2	10
Barium	100	U	0.67	100
Cadmium	2.0	U	0.66	2.0
Chromium	5.0	U	2.2	5.0
Lead	3.0	U	1.9	3.0
Selenium	5.0	U	4.1	5.0

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-5897	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-5359	Lab File ID:	HG10622A.PRN
Dilution:	1.0			Initial Weight/Volume:	100 mL
Analysis Date:	06/22/2011 1758			Final Weight/Volume:	100 mL
Prep Date:	06/20/2011 1405				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

Client: ARCADIS U.S., Inc. Job Number: 240-759-1

Client Sample ID: **MW-206B(053111)**

Lab Sample ID: 240-759-6 Date Sampled: 05/31/2011 1700
Client Matrix: Water Date Received: 06/01/2011 0950

6010B Metals (ICP)-Dissolved

Analysis Method:	6010B	Analysis Batch:	240-6343	Instrument ID:	I5
Prep Method:	3005A	Prep Batch:	240-5513	Lab File ID:	I50627A
Dilution:	1.0			Initial Weight/Volume:	50 mL
Analysis Date:	06/27/2011 1044			Final Weight/Volume:	50 mL
Prep Date:	06/21/2011 1230				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Silver	5.0	U	2.2	5.0
Arsenic	10	U	3.2	10
Barium	90	J	0.67	100
Cadmium	2.0	U	0.66	2.0
Chromium	5.0	U	2.2	5.0
Lead	3.0	U	1.9	3.0
Selenium	5.0	U	4.1	5.0

7470A Mercury (CVAA)-Dissolved

Analysis Method:	7470A	Analysis Batch:	240-5897	Instrument ID:	H1
Prep Method:	7470A	Prep Batch:	240-5359	Lab File ID:	HG10622A.PRN
Dilution:	1.0			Initial Weight/Volume:	100 mL
Analysis Date:	06/22/2011 1739			Final Weight/Volume:	100 mL
Prep Date:	06/20/2011 1405				

Analyte	Result (ug/L)	Qualifier	MDL	RL
Mercury	0.20	U	0.12	0.20

General Chemistry

Client Sample ID: **MW-203B(053111)**

Lab Sample ID: 240-759-1
Client Matrix: Water

Date Sampled: 05/31/2011 1300
Date Received: 06/01/2011 0950

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.010	U	mg/L	0.0050	0.010	1.0	9012A

Analysis Batch: 240-4249 Analysis Date: 06/09/2011 1146
Prep Batch: 240-4179 Prep Date: 06/09/2011 1110

General Chemistry

Client Sample ID: FD-1(053111)-TP

Lab Sample ID: 240-759-2FD
Client Matrix: Water

Date Sampled: 05/31/2011 0000
Date Received: 06/01/2011 0950

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.010	U	mg/L	0.0050	0.010	1.0	9012A

Analysis Batch: 240-4342 Analysis Date: 06/10/2011 1130
Prep Batch: 240-4356 Prep Date: 06/10/2011 1130

General Chemistry

Client Sample ID: **MW-202B(053111)**

Lab Sample ID: 240-759-3 Date Sampled: 05/31/2011 1430

Client Matrix: Water Date Received: 06/01/2011 0950

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.010	U	mg/L	0.0050	0.010	1.0	9012A

Analysis Batch: 240-4342 Analysis Date: 06/10/2011 1130

Prep Batch: 240-4356 Prep Date: 06/10/2011 1130

General Chemistry

Client Sample ID: **MW-201B(053111)**

Lab Sample ID: 240-759-4
Client Matrix: Water

Date Sampled: 05/31/2011 1545
Date Received: 06/01/2011 0950

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.010	U	mg/L	0.0050	0.010	1.0	9012A

Analysis Batch: 240-4342 Analysis Date: 06/10/2011 1130
Prep Batch: 240-4356 Prep Date: 06/10/2011 1130

General Chemistry

Client Sample ID: **EB-1(053111)-TP**

Lab Sample ID: 240-759-5
Client Matrix: Water

Date Sampled: 05/31/2011 1600
Date Received: 06/01/2011 0950

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.010	U	mg/L	0.0050	0.010	1.0	9012A

Analysis Batch: 240-4249 Analysis Date: 06/09/2011 1213
Prep Batch: 240-4179 Prep Date: 06/09/2011 1110

General Chemistry

Client Sample ID: **MW-206B(053111)**

Lab Sample ID: 240-759-6
Client Matrix: Water

Date Sampled: 05/31/2011 1700
Date Received: 06/01/2011 0950

Analyte	Result	Qual	Units	MDL	RL	Dil	Method
Cyanide, Total	0.010	U	mg/L	0.0050	0.010	1.0	9012A
Analysis Batch: 240-4249	Analysis Date: 06/09/2011 1147						
Prep Batch: 240-4179	Prep Date: 06/09/2011 1110						

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Attachment 3

Statistical Evaluation of
Background Groundwater Quality

Attachment 3 – 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 metals [arsenic, barium, cadmium, chromium, lead, mercury, silver and selenium] and total 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 by 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 1**). 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 1, 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 2-1** through **2-9**. The high percentage of NDs is notable for each parameter. Cyanide, lead, mercury, and silver were not detected in any monitoring well. With the exception of cadmium, 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 3**. 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, and selenium. Results were all ND for cadmium, cyanide, 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 2003 to May 2011). The p-value for the Mann-Kendall test is 0.41 (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 six (6) of the seven (7) detected observations occurred in Spring (the spring sampling events). 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=0.50) with concentrations decreasing at a rate of 1.4×10^{-6} mg/L per day or approximately 0.49 • g/L per year since 2003, with a 95% upper confidence limit for the median slope equal to 7.8 • g/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 metals [arsenic, barium, cadmium, chromium, lead, mercury, silver and 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 (• [ln detects] = 0.125), the Kaplan-Meier 95/99 UTL was used to represent the BSL. Arsenic, chromium, and selenium 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, cyanide, 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 May 2011 sampling event. As presented in **Table 3**, only barium was detected of the indicator parameters, but in concentrations less than the BSL. The remaining indicator parameters were not detected in the compliance wells during this 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 wells. 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)	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)	11/23/09	<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
	MW-201B (10202010)	10/20/10	0.0063	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	MW-201B (053111)	05/31/11	<0.0100	0.011 J	<0.0020	<0.0050	<0.0030	<0.00020	<0.0050	<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)	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
	MW-202B (10202010)	10/20/10	<0.0050	0.110	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	MW-202B (053111)	05/31/11	<0.0100	0.035 J	<0.0020	<0.0050	<0.0030	<0.00020	<0.0050	<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)	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
	MW-203B (10202010)	10/20/10	<0.0050	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	MW-203B (10202010) FD	10/20/10	<0.0050	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	MW-203B (053111)	05/31/11	<0.0100	0.030 J	<0.0020	<0.0050	<0.0030	<0.00020	<0.0050	<0.0500	<0.010
	MW-203B (053111) FD	05/31/11	<0.0100	0.032 J	<0.0020	<0.0050	<0.0030	<0.00020	<0.0050	<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)	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)	11/23/09	<0.0050	<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
	MW-206B (10202010)	10/20/10	<0.0050	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	MW-206B (053111)	05/31/11	<0.0100	0.090 J	<0.0020	<0.0050	<0.0030	<0.00020	<0.0050	<0.0050	<0.010

Notes: * Re-evaluation of Reporting limits provided by Pace Analytical Services, Inc. (letter dated April 28, 2006)
Table includes results for most recent 16 valid sample observations.

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	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	0.0883	<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	0.0162	0.096	<0.0010	<0.0100*	<0.0050	<0.0020	<0.0100	<0.0100	<0.0200
	11/10/2005	<0.0100	0.0810	<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
	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
	10/20/2010	<0.0050	<0.100	<0.0050	<0.0100	<0.0050	<0.0020	<0.0100	<0.0500	<0.010
	5/31/2011	<0.0100	0.090 J	<0.0020	<0.0050	<0.0030	<0.0002	<0.0050	<0.0050	<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)

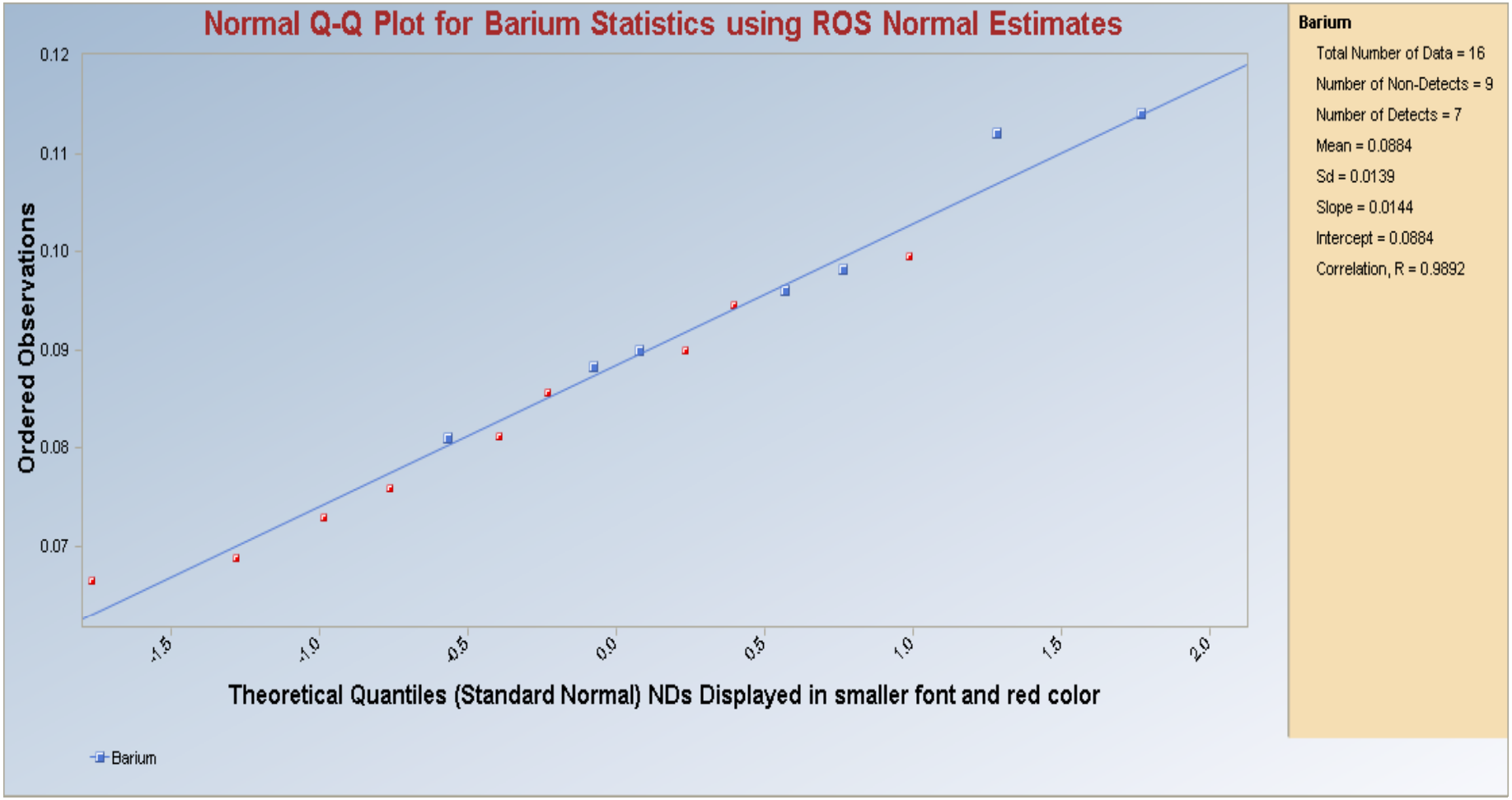
TABLE 3

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	2011 Sampling Dates	> BSL ?
Arsenic	1 / 16	0.016	NA	NA	0.02	< 0.01	All 3 wells	5/31/11	No
Barium	7 / 16	0.114	0.127	Kaplan-Meier [2]	0.13	0.035	MW-202B	5/31/11	No
Cadmium	0 / 16	< 0.005	NA	NA	0.01	< 0.002	All 3 wells	5/31/11	No
Chromium	3 / 16	0.076	NA	NA	0.08	< 0.005	All 3 wells	5/31/11	No
Lead	0 / 16	< 0.01	NA	NA	0.01	< 0.003	All 3 wells	5/31/11	No
Mercury	0 / 16	< 0.002	NA	NA	0.00	< 0.0002	All 3 wells	5/31/11	No
Selenium	1 / 16	0.0114	NA	NA	0.01	< 0.005	All 3 wells	5/31/11	No
Silver	0 / 16	< 0.05	NA	NA	0.05	< 0.05	All 3 wells	5/31/11	No
Cyanide	0 / 16	< 0.02	NA	NA	0.02	< 0.01	All 3 wells	5/31/11	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. BSL calculated with the most recent 16 samples only.
[2] Data are left censored with n=16 and detects = 7, 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.

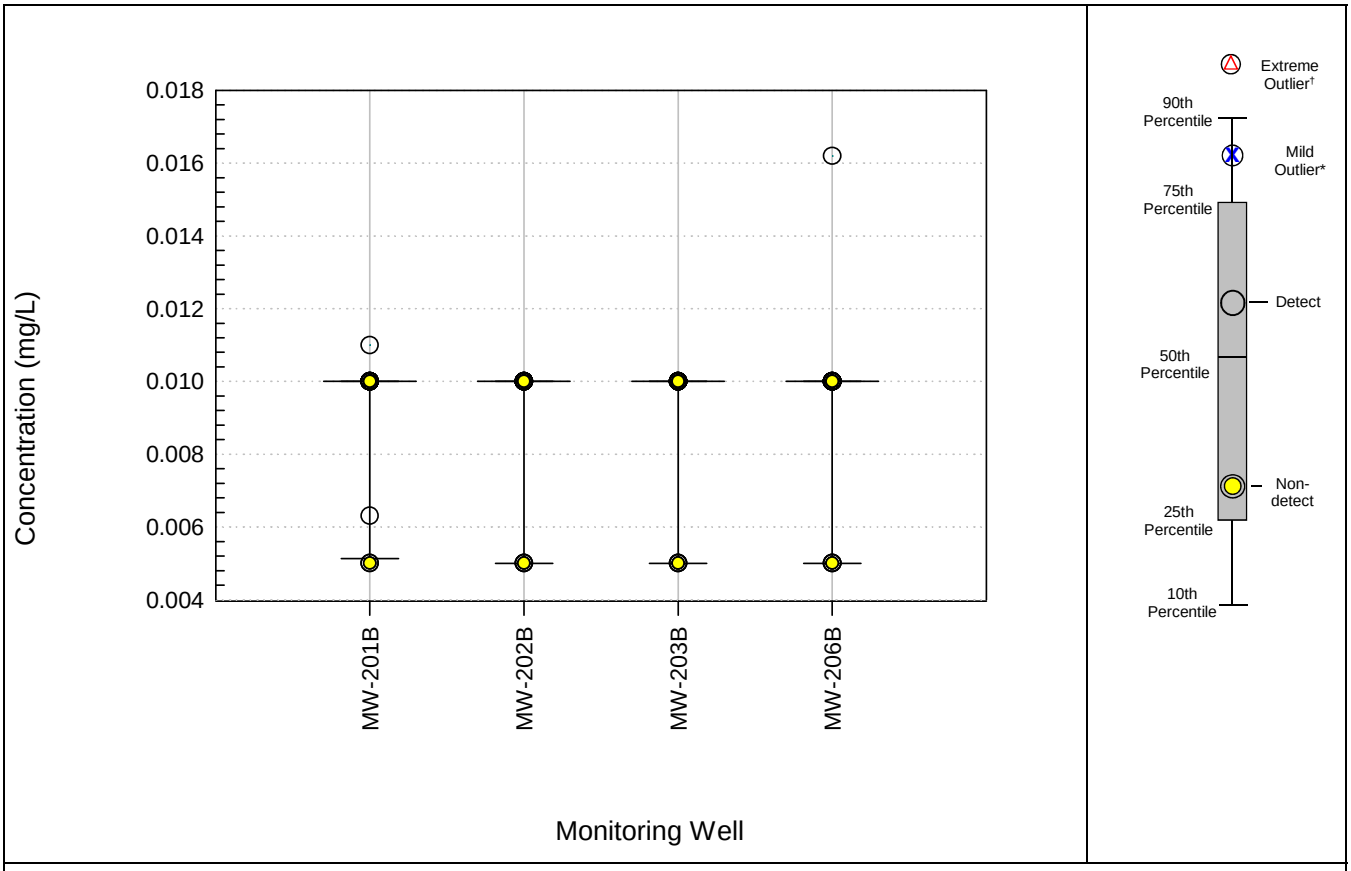


ARCADIS

Normal Q-Q Plot – Barium in Monitoring Well 206B

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

Figure 1



ARCADIS

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

Figure 2-1

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	14	2	16	0.0050	0.010	0.0063	0.011	0.0087	0.0087	0.0033	0.010	0.010	0.010
MW-202B	mg/L	16	0	16	0.0050	0.010	ND	ND	ND	ND	ND	0.010	0.010	0.010
MW-203B	mg/L	16	0	16	0.0050	0.010	ND	ND	ND	ND	ND	0.010	0.010	0.010
MW-206B	mg/L	15	1	16	0.0050	0.010	0.016	0.016	0.016	0.016	NA	0.010	0.010	0.010

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

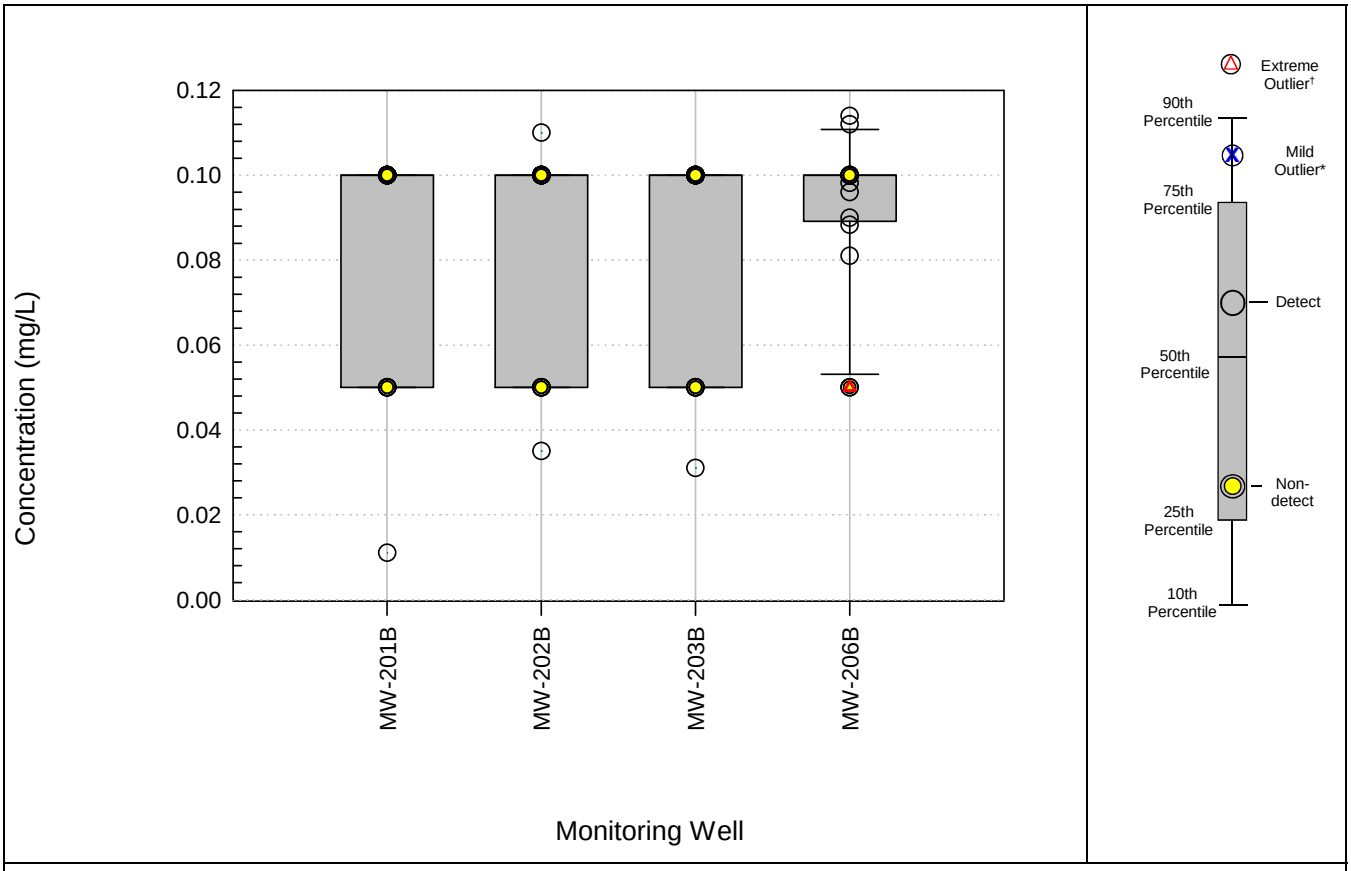
NA = value not applicable due to frequency of detection

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 2-2

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	15	1	16	0.050	0.10	0.011	0.011	0.011	0.011	NA	0.050	0.10	0.10
MW-202B	mg/L	14	2	16	0.050	0.10	0.035	0.11	0.073	0.072	0.053	0.050	0.10	0.10
MW-203B	mg/L	15	1	16	0.050	0.10	0.031	0.031	0.031	0.031	NA	0.050	0.10	0.10
MW-206B	mg/L	9	7	16	0.050	0.10	0.081	0.11	0.097	0.096	0.012	0.089	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

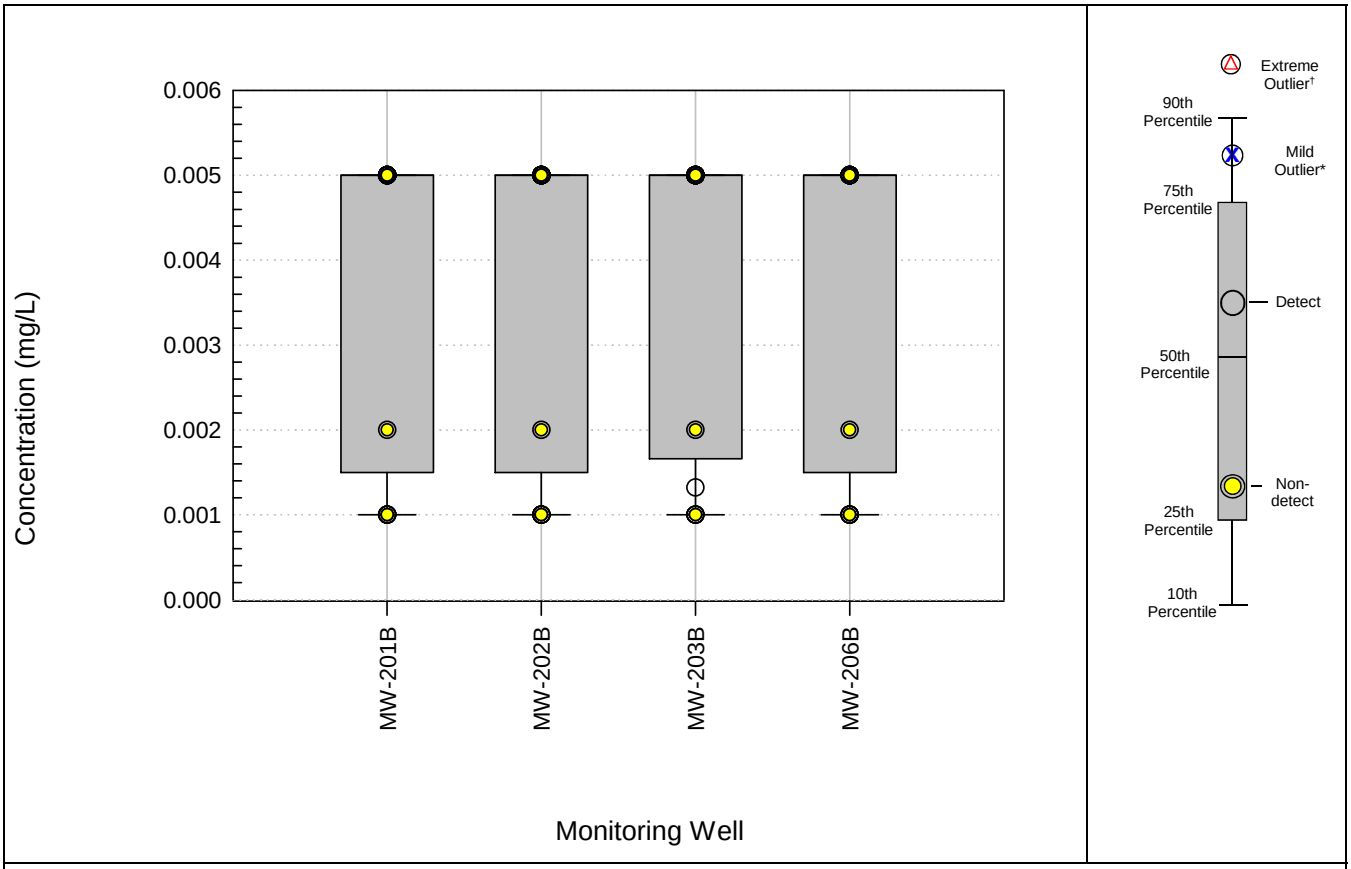
NA = value not applicable due to frequency of detection

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 2-3

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	0.0010	0.0050	ND	ND	ND	ND	ND	0.0015	0.0050	0.0050
MW-202B	mg/L	16	0	16	0.0010	0.0050	ND	ND	ND	ND	ND	0.0015	0.0050	0.0050
MW-203B	mg/L	15	1	16	0.0010	0.0050	0.0013	0.0013	0.0013	0.0013	NA	0.0017	0.0050	0.0050
MW-206B	mg/L	16	0	16	0.0010	0.0050	ND	ND	ND	ND	ND	0.0015	0.0050	0.0050

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

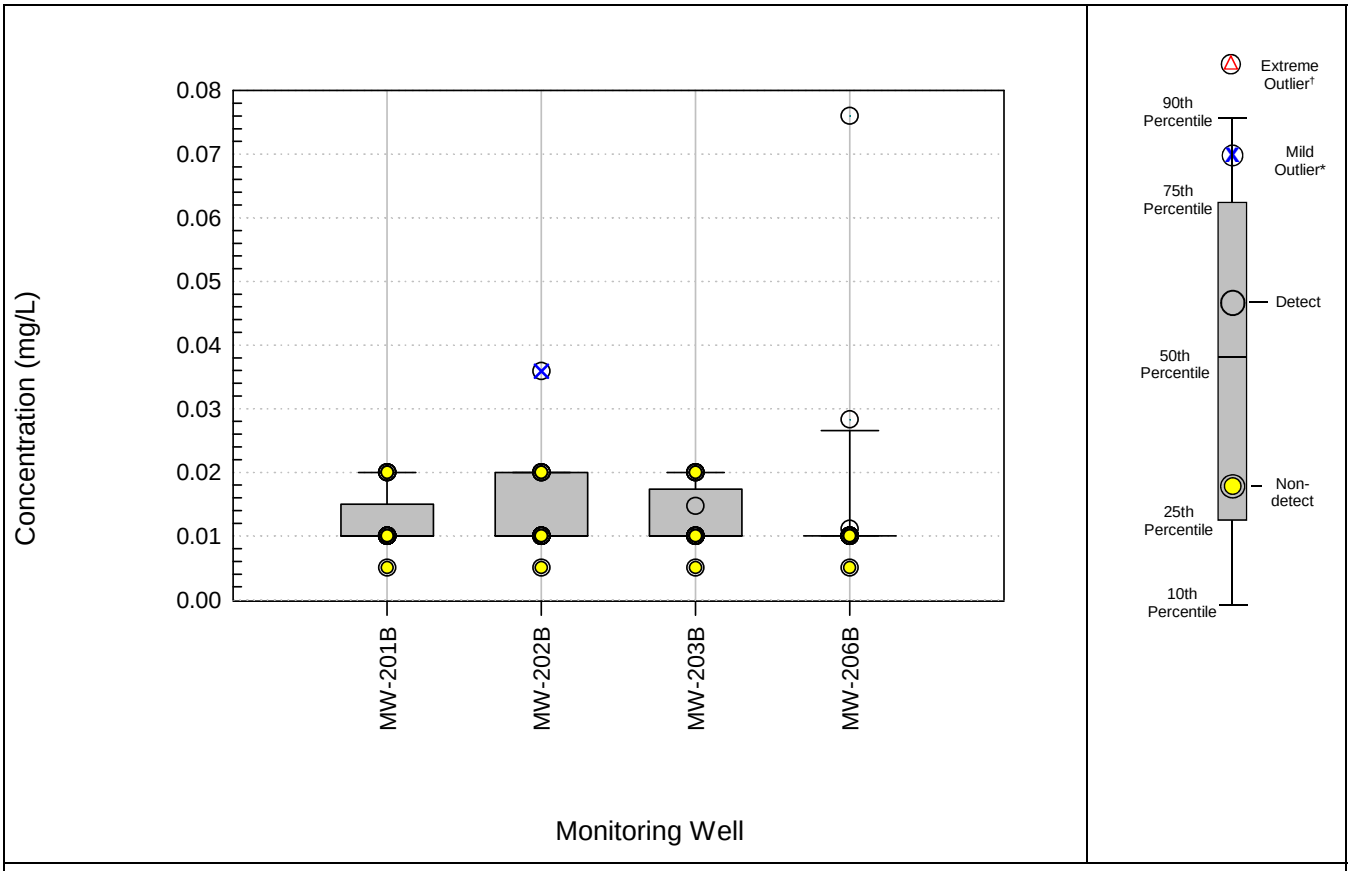
NA = value not applicable due to frequency of detection

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 2-4

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	0.0050	0.020	ND	ND	ND	ND	ND	0.010	0.010	0.015
MW-202B	mg/L	15	1	16	0.0050	0.020	0.036	0.036	0.036	0.036	NA	0.010	0.010	0.020
MW-203B	mg/L	15	1	16	0.0050	0.020	0.015	0.015	0.015	0.015	NA	0.010	0.010	0.017
MW-206B	mg/L	13	3	16	0.0050	0.010	0.011	0.076	0.038	0.028	0.034	0.010	0.010	0.010

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

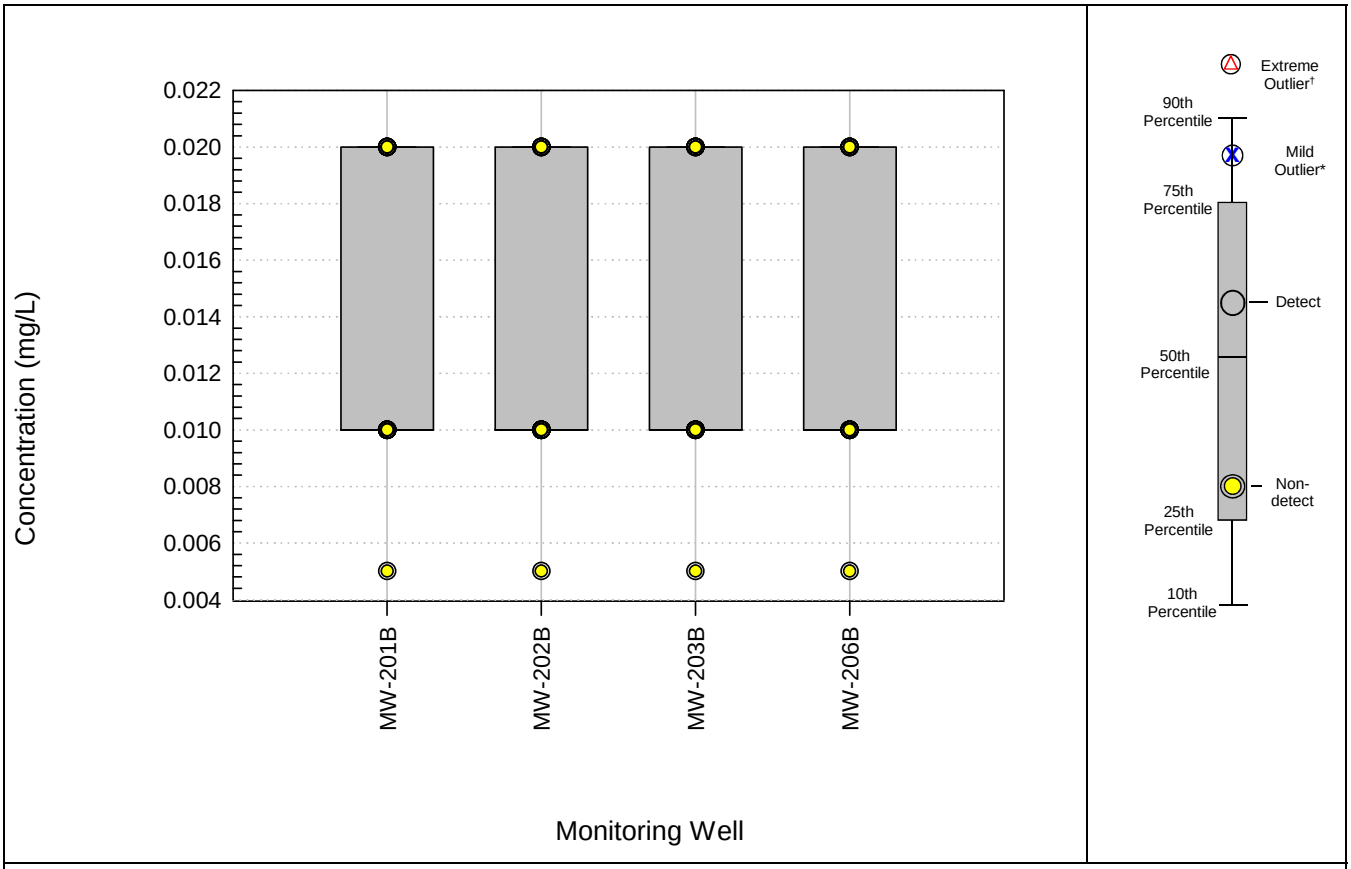
NA = value not applicable due to frequency of detection

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 2-5

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	16	0	16	0.0050	0.020	ND	ND	ND	ND	ND	0.010	0.010	0.020
MW-202B	mg/L	16	0	16	0.0050	0.020	ND	ND	ND	ND	ND	0.010	0.010	0.020
MW-203B	mg/L	16	0	16	0.0050	0.020	ND	ND	ND	ND	ND	0.010	0.010	0.020
MW-206B	mg/L	16	0	16	0.0050	0.020	ND	ND	ND	ND	ND	0.010	0.010	0.020

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

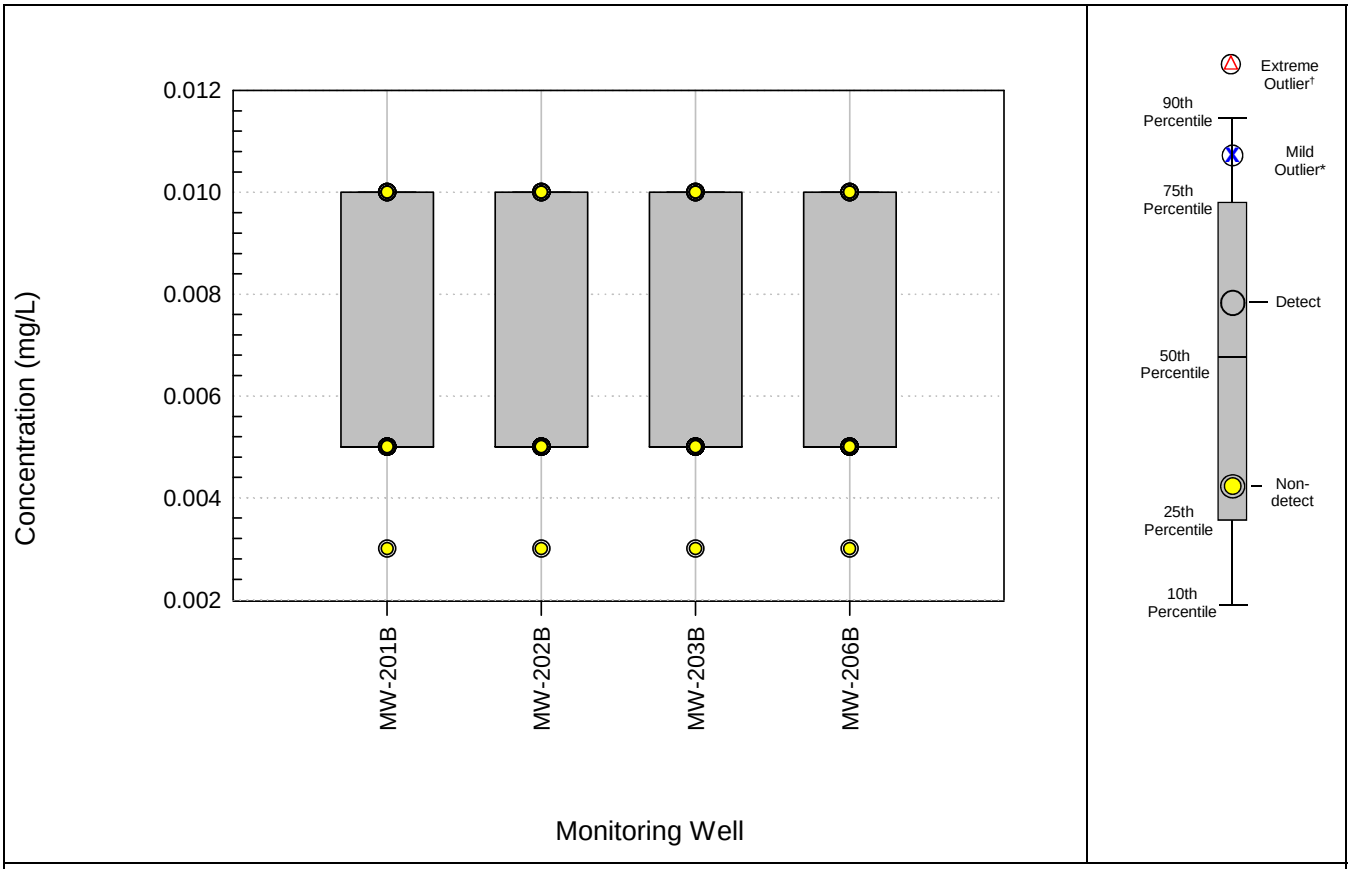
NA = value not applicable due to frequency of detection

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 2-6

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	0.0030	0.010	ND	ND	ND	ND	ND	0.0050	0.0050	0.010
MW-202B	mg/L	16	0	16	0.0030	0.010	ND	ND	ND	ND	ND	0.0050	0.0050	0.010
MW-203B	mg/L	16	0	16	0.0030	0.010	ND	ND	ND	ND	ND	0.0050	0.0050	0.010
MW-206B	mg/L	16	0	16	0.0030	0.010	ND	ND	ND	ND	ND	0.0050	0.0050	0.010

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

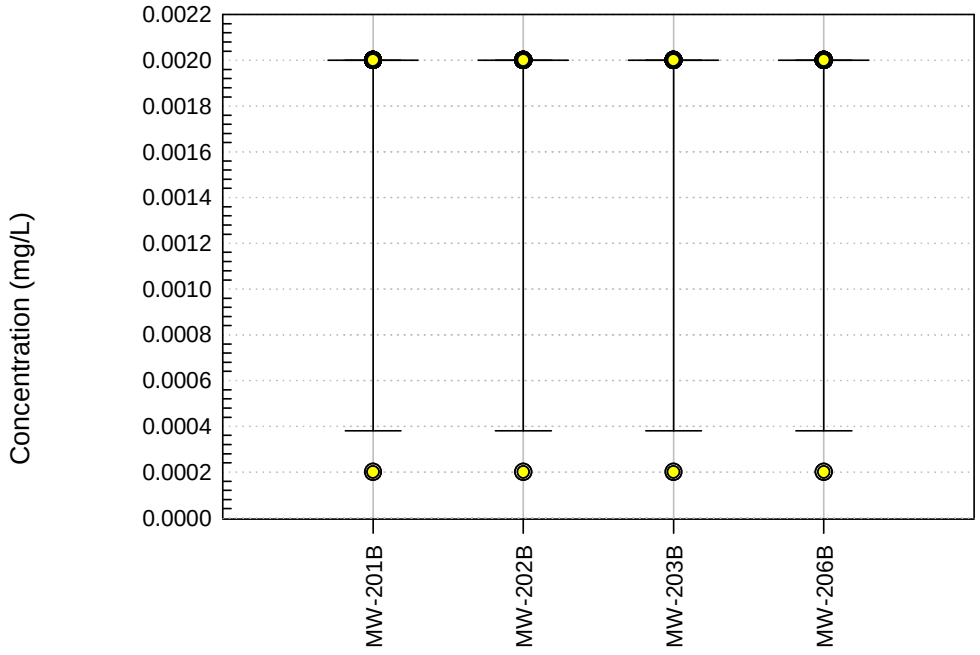
NA = value not applicable due to frequency of detection

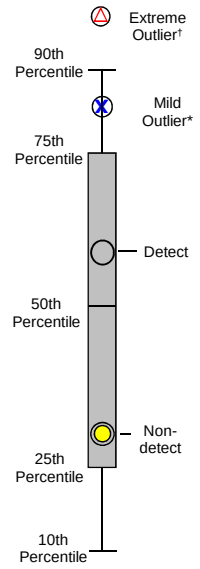
ND = non-detect

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 2-7

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	0.00020	0.0020	ND	ND	ND	ND	ND	0.0020	0.0020	0.0020
MW-202B	mg/L	16	0	16	0.00020	0.0020	ND	ND	ND	ND	ND	0.0020	0.0020	0.0020
MW-203B	mg/L	16	0	16	0.00020	0.0020	ND	ND	ND	ND	ND	0.0020	0.0020	0.0020
MW-206B	mg/L	16	0	16	0.00020	0.0020	ND	ND	ND	ND	ND	0.0020	0.0020	0.0020

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

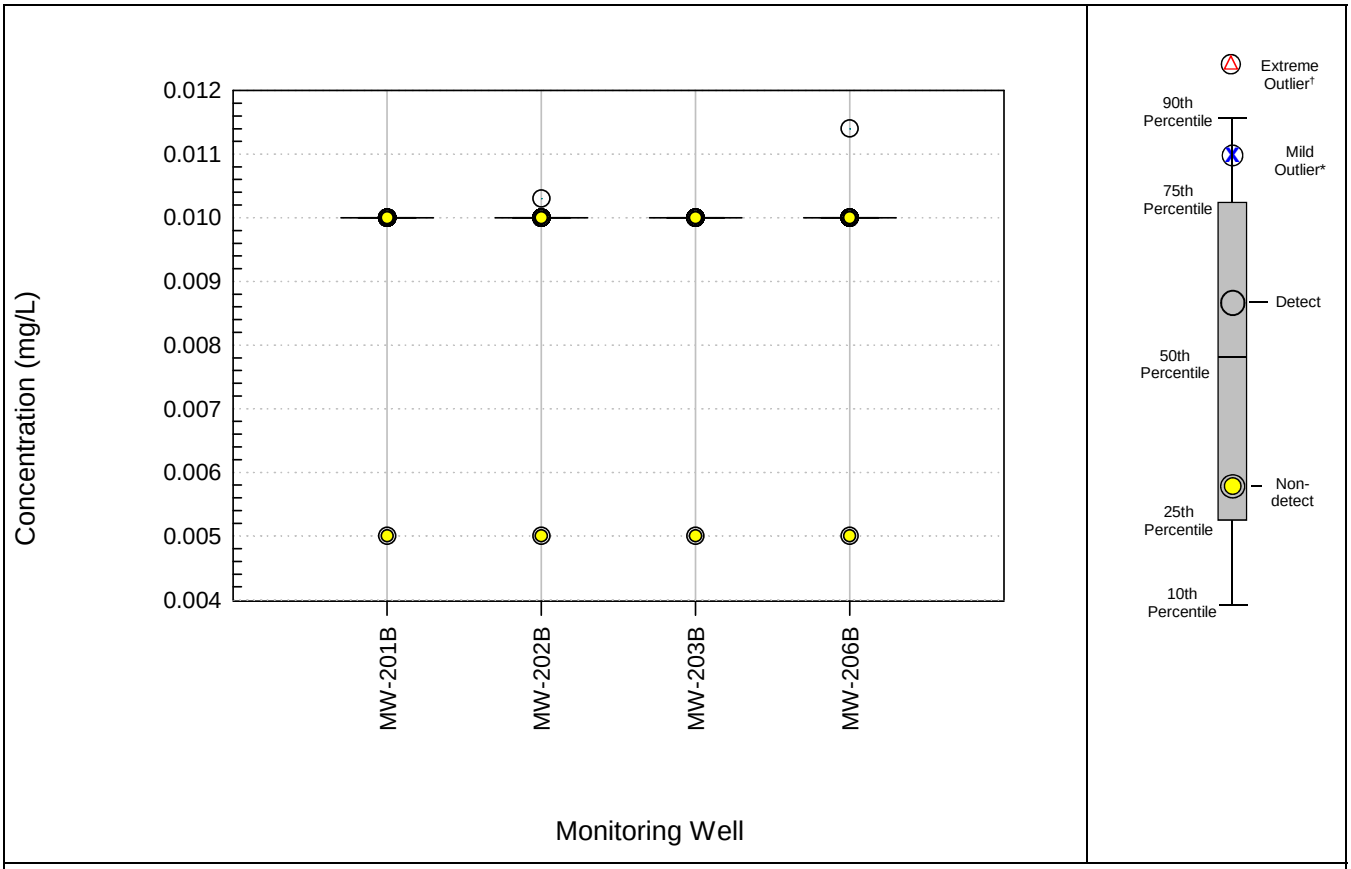
NA = value not applicable due to frequency of detection

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 2-8

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	16	0	16	0.0050	0.010	ND	ND	ND	ND	ND	0.010	0.010	0.010
MW-202B	mg/L	15	1	16	0.0050	0.010	0.010	0.010	0.010	0.010	NA	0.010	0.010	0.010
MW-203B	mg/L	16	0	16	0.0050	0.010	ND	ND	ND	ND	ND	0.010	0.010	0.010
MW-206B	mg/L	15	1	16	0.0050	0.010	0.011	0.011	0.011	0.011	NA	0.010	0.010	0.010

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

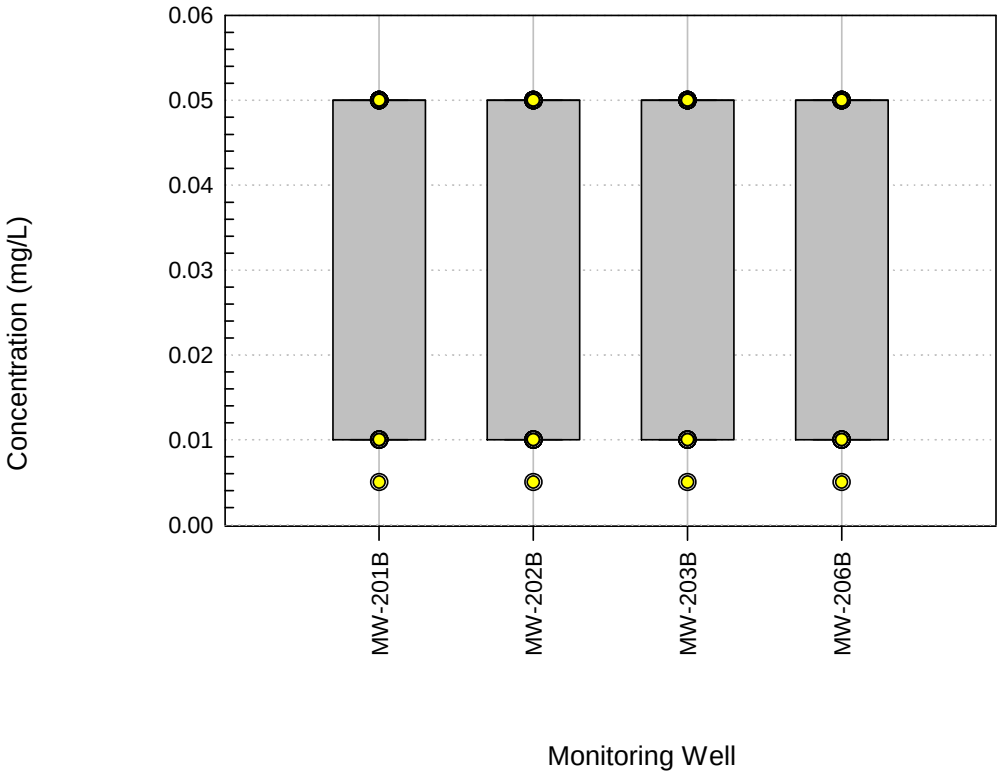
NA = value not applicable due to frequency of detection

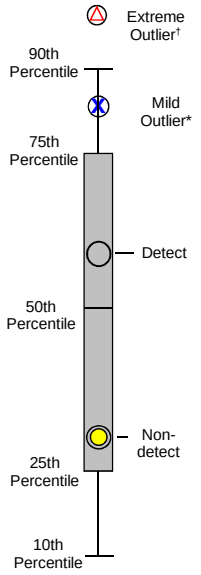
ND = non-detect

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 2-9

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	0.0050	0.050	ND	ND	ND	ND	ND	0.010	0.050	0.050
MW-202B	mg/L	16	0	16	0.0050	0.050	ND	ND	ND	ND	ND	0.010	0.050	0.050
MW-203B	mg/L	16	0	16	0.0050	0.050	ND	ND	ND	ND	ND	0.010	0.050	0.050
MW-206B	mg/L	16	0	16	0.0050	0.050	ND	ND	ND	ND	ND	0.010	0.050	0.050

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

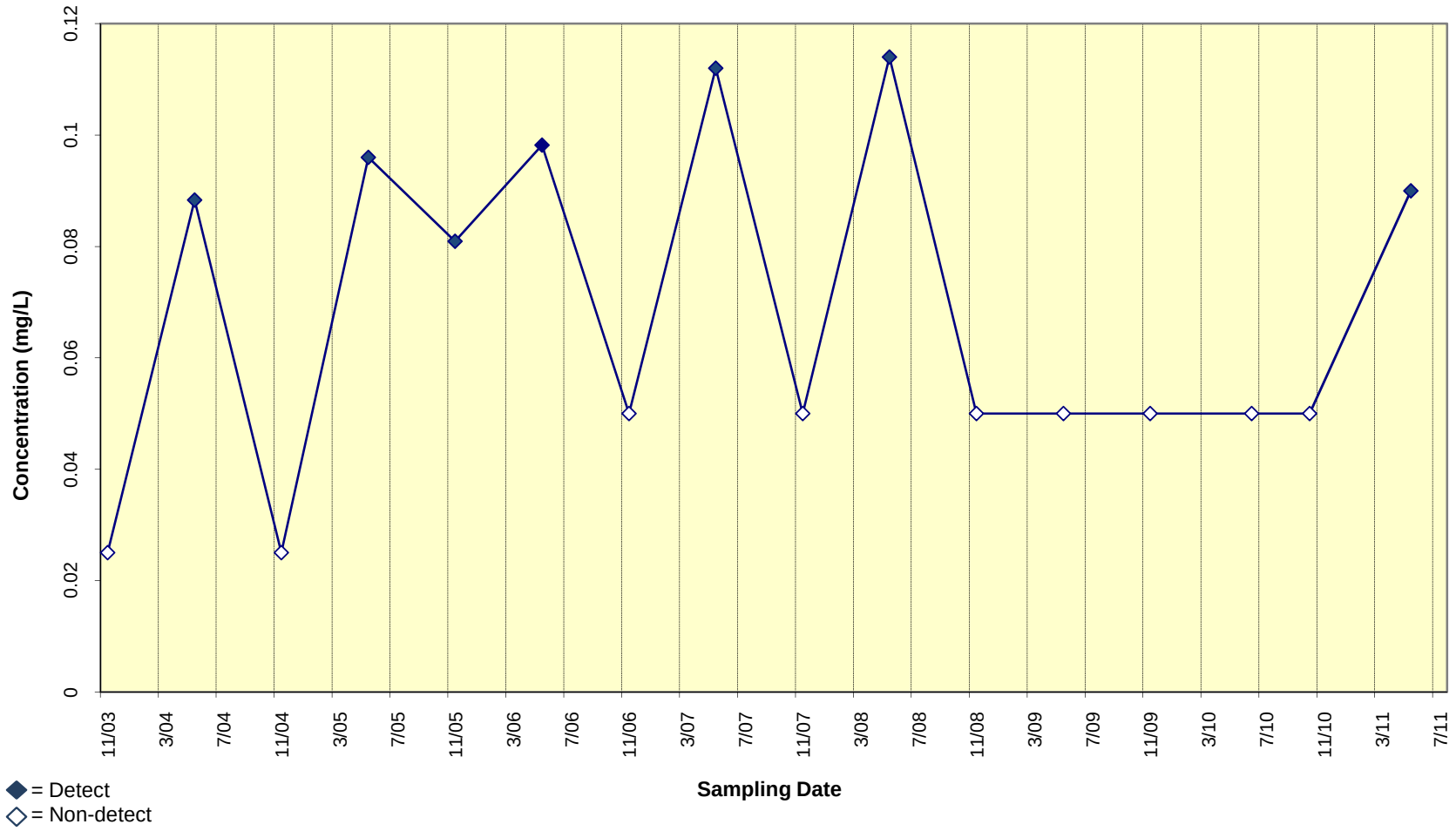
NA = value not applicable due to frequency of detection

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 = 0.412 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 = -1.8E-05 to 1.4E-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 3