

US EPA ARCHIVE DOCUMENT



**Deigan & Associates, LLC**

**Environmental Consultants**

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March 29, 2011

Ms. Jill Groboski (LU-9J) via email  
Project Manager  
US EPA Region V, Land and Chemicals Division  
Remediation and Reuse Branch, Corrective Action Section  
77 West Jackson Blvd.  
Chicago, Illinois 60604-3590

**Re: Description of Current Conditions (DOCC) Report Addendum  
5th Round of Groundwater Sampling/Analysis  
Former Lake Shore Foundry, Waukegan, IL. (ILR000 1110591)**

Dear Ms. Groboski:

As requested by USEPA, enclosed please find the results of an additional round of groundwater sampling and analysis at the above-referenced property conducted on behalf of NorStates Bank. Table 1 provides a summary table comparing the March 4, 2011 sampling event for total and dissolved metals against the applicable Illinois Class I & II groundwater standards. The data shows that no Class I & II groundwater standards are exceeded at the four (4) on-site monitoring wells except total copper at MW-02 is reported at 0.74 mg/L, nearly equal to IEPA's groundwater standard of 0.65mg/L.

The prior completed source removal interim measures corrective action work continues to result in improved site groundwater quality trends. Additional source removal was also completed by removing metals-laden foundry sand in interior building floor trenches and pits during the most recent demolition work, as was documented in our February 22, 2011 letter to you.

Please contact me with any comments or questions and what next timely steps can be taken to close out the Consent Order.

Sincerely,  
Deigan & Associates, LLC

  
Gary J. Deigan, Principal

cc: K. Biegay, NorStates Bank

Enclosure: Table and Data

Customer	Deigan & Associates
Project	Former Lake Shore Foundry
Sample Date	3/4/2011
Lab Name	TestAmerica Chicago
Job Number	500-31462-1

TABLE 1

Analytical Results for Water Samples		* Exposure Routes for Specific SROs				Sample ID pH					
		Ingestion	Inhalation	Class I	Class II		LSF-MW-01	LSF-MW-02	LSF-MW-03	LSF-MW-04	EXISTING AMPSKY BACKGROUND MW
Method	Analyte	mg/L	mg/L	mg/L	mg/L	7.28	7.30	7.50	7.56	7.25	
6010B	Arsenic	NRO	NRO	0.05	0.2	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6010B	Barium	NRO	NRO	2	2	0.078	0.12	0.053	0.045	0.056	
6010B	Beryllium	NRO	NRO	0.004	0.5	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	
6010B	Cadmium	NRO	NRO	0.005	0.05	<0.0020	0.0015	<0.0020	<0.0020	<0.0020	<0.0020
6010B	Chromium	NRO	NRO	0.1	1	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
6010B	Cobalt	NRO	NRO	1	1	<0.0050	0.0083	<0.0050	<0.0050	<0.0050	<0.0050
6010B	Copper	NRO	NRO	0.65	0.65	0.0030	0.74	0.26	0.024	<0.010	
6010B	Lead	NRO	NRO	0.0075	0.1	<0.0050	0.0067	0.0026	<0.0050	0.0017	
6010B	Nickel	NRO	NRO	0.1	2	0.0022	0.027	0.012	0.0027	<0.010	
6010B	Selenium	NRO	NRO	0.05	0.05	<0.010	<0.010	<0.010	<0.010	<0.010	
6010B	Silver	NRO	NRO	0.05	NRO	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
6010B	Tin	NRO	NRO	4.2	NRO	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040
6010B	Vanadium	NRO	NRO	0.049	0.1	0.0037	0.0037	0.0026	0.0032	0.0028	
6010B	Zinc	NRO	NRO	5	10	0.011	0.72	0.17	0.027	0.0052	
6010B-Diss	Arsenic, Diss	NRO	NRO	NRO	NRO	<0.010	<0.010	<0.010	<0.010	<0.010	
6010B-Diss	Barium, Diss	NRO	NRO	NRO	NRO	0.058	0.098	0.043	0.046	0.026	
6010B-Diss	Beryllium, Diss	NRO	NRO	NRO	NRO	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	
6010B-Diss	Cadmium, Diss	NRO	NRO	NRO	NRO	<0.0020	0.0011	<0.0020	<0.0020	<0.0020	
6010B-Diss	Chromium, Diss	NRO	NRO	NRO	NRO	0.0069	<0.010	<0.010	<0.010	<0.010	
6010B-Diss	Cobalt, Diss	NRO	NRO	NRO	NRO	<0.0050	0.0066	<0.0050	<0.0050	<0.0050	
6010B-Diss	Copper, Diss	NRO	NRO	NRO	NRO	<0.010	0.57	0.21	0.050	0.015	
6010B-Diss	Lead, Diss	NRO	NRO	NRO	NRO	<0.0050	0.0026	<0.0050	<0.0050	0.0017	
6010B-Diss	Nickel, Diss	NRO	NRO	NRO	NRO	0.0020	0.022	0.0099	<0.010	0.0026	
6010B-Diss	Selenium, Diss	NRO	NRO	NRO	NRO	<0.010	<0.010	<0.010	<0.010	<0.010	
6010B-Diss	Silver, Diss	NRO	NRO	NRO	NRO	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
6010B-Diss	Tin, Diss	NRO	NRO	NRO	NRO	<0.040	<0.040	<0.040	<0.040	<0.040	
6010B-Diss	Vanadium, Diss	NRO	NRO	NRO	NRO	0.0033	0.0036	0.0023	0.0027	0.0032	
6010B-Diss	Zinc, Diss	NRO	NRO	NRO	NRO	0.0085	0.60	0.14	0.0093	0.021	
6020	Antimony	NRO	NRO	0.006	0.024	<0.0030	0.0014	0.0014	0.0010	<0.0030	
6020	Thallium	NRO	NRO	0.002	0.02	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	
6020-Diss	Antimony, Diss	NRO	NRO	NRO	NRO	<0.0030	0.0012	0.0010	<0.0030	0.00083	
6020-Diss	Thallium, Diss	NRO	NRO	NRO	NRO	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	
7470A	Mercury	NRO	NRO	0.002	0.01	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	
7470A-Diss	Mercury, Diss	NRO	NRO	NRO	NRO	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	

\* Exposure Routes for Soil Remediation Objectives (SROs) are based on Title 35 Part 742 Tier 1 Appendix B Table E.

All results are mg/L unless otherwise requested.

Note 1: Results that are Bolded and Shaded indicate that the measured concentration exceeds any one of the SROs.

NRO = (No Remediation Objective) was provided in the tables.

\*\* The groundwater objective is equal to the Acceptable Detection Limit (ADL) for carcinogens.

**NRO/NRO\*\*** indicates that pH analysis was not requested and the values for Class I and Class II can not be provided.

Non TACO analytes are italicized and limits are based on the Illinois EPA Toxicity Assessment Unit May 1, 2007.

Additional analytes may have been requested to be reported but are not contained in the non-TACO or TACO Tier 1 tables and are not evaluated.

Estimated results that are reported between the MDL and RL (J flags) may be reported but are not indicated with a flag.

Please refer to the report.

Results may have been achieved by a dilution and are not indicated with a flag. Please refer to the report.

3&4-Methylphenol do not separate analytically on the 8270 columns and are reported as combined analytes.

Xylenes, Total is a calculated result in TALs by adding the m,p-Xylene and o-Xylene results.

Total PCB is a calculated result in TALs by adding the individual PCB aroclors.

These footnotes are not an all inclusive list from Section 742 Appendix B Tier 1 Tables A through H.

For a complete detailed list see Section 742 Appendix B Tier 1 Tables A through H.

+ Reported according to the proposed amendments to TACO.



# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

## ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Chicago

2417 Bond Street

University Park, IL 60484

Tel: (708)534-5200

TestAmerica Job ID: 500-31462-1

TestAmerica Sample Delivery Group: 500-31462-1

Client Project/Site: Former Lake Shore Foundry

For:

Deigan & Associates

1801 Sheridan Rd.

Suite 103

North Chicago, Illinois 60064

Attn: Gary Deigan

Authorized for release by:

03/11/2011 03:08:40 PM

Richard Wright

Project Manager II

[richard.wright@testamericainc.com](mailto:richard.wright@testamericainc.com)

### LINKS

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results through

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The  
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[www.testamericainc.com](http://www.testamericainc.com)

*This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.*

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## Case Narrative

Client: Deigan & Associates  
Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1  
SDG: 500-31462-1

### Job ID: 500-31462-1

Laboratory: TestAmerica Chicago

#### Narrative

Job Narrative  
500-31462-1

#### Comments

No additional comments.

#### Receipt

All samples were received in good condition within temperature requirements.

#### Metals

Method(s) 6020: The CCB at line 24 in AD batch 107429 was slightly above the acceptance limits for Ti. The samples were all below the RL and, therefore, reported.

No other analytical or quality issues were noted.

#### General Chemistry

No analytical or quality issues were noted.

# Detection Summary

Client: Deigan & Associates  
 Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1  
 SDG: 500-31462-1

**Client Sample ID: LSF-MW-01**

**Lab Sample ID: 500-31462-1**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.078	B	0.010	0.00090	mg/L	1	6010B	Total/NA	
Copper	0.0030	J	0.010	0.0015	mg/L	1	6010B	Total/NA	
Nickel	0.0022	J	0.010	0.0016	mg/L	1	6010B	Total/NA	
Vanadium	0.0037	J	0.0050	0.0010	mg/L	1	6010B	Total/NA	
Zinc	0.011	J	0.020	0.0035	mg/L	1	6010B	Total/NA	
Barium	0.058	B	0.010	0.00090	mg/L	1	6010B	Dissolved	
Chromium	0.0069	J	0.010	0.0014	mg/L	1	6010B	Dissolved	
Nickel	0.0020	J	0.010	0.0016	mg/L	1	6010B	Dissolved	
Vanadium	0.0033	J	0.0050	0.0010	mg/L	1	6010B	Dissolved	
Zinc	0.0085	J	0.020	0.0035	mg/L	1	6010B	Dissolved	
pH	7.28	HF	0.200	0.200	SU	1	9040B	Total/NA	

**Client Sample ID: LSF-MW-02**

**Lab Sample ID: 500-31462-2**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.12	B	0.010	0.00090	mg/L	1	6010B	Total/NA	
Cadmium	0.0015	J	0.0020	0.00025	mg/L	1	6010B	Total/NA	
Cobalt	0.0083		0.0050	0.0012	mg/L	1	6010B	Total/NA	
Copper	0.74		0.010	0.0015	mg/L	1	6010B	Total/NA	
Lead	0.0067		0.0050	0.0017	mg/L	1	6010B	Total/NA	
Nickel	0.027		0.010	0.0016	mg/L	1	6010B	Total/NA	
Vanadium	0.0037	J	0.0050	0.0010	mg/L	1	6010B	Total/NA	
Zinc	0.72		0.020	0.0035	mg/L	1	6010B	Total/NA	
Barium	0.098	B	0.010	0.00090	mg/L	1	6010B	Dissolved	
Cadmium	0.0011	J	0.0020	0.00025	mg/L	1	6010B	Dissolved	
Cobalt	0.0066		0.0050	0.0012	mg/L	1	6010B	Dissolved	
Copper	0.57		0.010	0.0015	mg/L	1	6010B	Dissolved	
Lead	0.0026	J	0.0050	0.0017	mg/L	1	6010B	Dissolved	
Nickel	0.022		0.010	0.0016	mg/L	1	6010B	Dissolved	
Vanadium	0.0036	J	0.0050	0.0010	mg/L	1	6010B	Dissolved	
Zinc	0.60		0.020	0.0035	mg/L	1	6010B	Dissolved	
Antimony	0.0014	J	0.0030	0.00063	mg/L	1	6020	Total Recovered	
Antimony	0.0012	J	0.0030	0.00063	mg/L	1	6020	Dissolved	
pH	7.30	HF	0.200	0.200	SU	1	9040B	Total/NA	

**Client Sample ID: LSF-MW-03**

**Lab Sample ID: 500-31462-3**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.053	B	0.010	0.00090	mg/L	1	6010B	Total/NA	
Copper	0.26		0.010	0.0015	mg/L	1	6010B	Total/NA	
Lead	0.0026	J	0.0050	0.0017	mg/L	1	6010B	Total/NA	
Nickel	0.012		0.010	0.0016	mg/L	1	6010B	Total/NA	
Vanadium	0.0026	J	0.0050	0.0010	mg/L	1	6010B	Total/NA	
Zinc	0.17		0.020	0.0035	mg/L	1	6010B	Total/NA	
Barium	0.043	B	0.010	0.00090	mg/L	1	6010B	Dissolved	
Copper	0.21		0.010	0.0015	mg/L	1	6010B	Dissolved	
Nickel	0.0099	J	0.010	0.0016	mg/L	1	6010B	Dissolved	
Vanadium	0.0023	J	0.0050	0.0010	mg/L	1	6010B	Dissolved	
Zinc	0.14		0.020	0.0035	mg/L	1	6010B	Dissolved	
Antimony	0.0014	J	0.0030	0.00063	mg/L	1	6020	Total Recovered	
Antimony	0.0010	J	0.0030	0.00063	mg/L	1	6020	Dissolved	
pH	7.50	HF	0.200	0.200	SU	1	9040B	Total/NA	

# Detection Summary

Client: Deigan & Associates  
 Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1  
 SDG: 500-31462-1

**Client Sample ID: LSF-MW-04**

**Lab Sample ID: 500-31462-4**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.045	B	0.010	0.00090	mg/L	1	6010B	Total/NA	
Copper	0.024		0.010	0.0015	mg/L	1	6010B	Total/NA	
Nickel	0.0027	J	0.010	0.0016	mg/L	1	6010B	Total/NA	
Vanadium	0.0032	J	0.0050	0.0010	mg/L	1	6010B	Total/NA	
Zinc	0.027		0.020	0.0035	mg/L	1	6010B	Total/NA	
Barium	0.046	B	0.010	0.00090	mg/L	1	6010B	Dissolved	
Copper	0.0050	J	0.010	0.0015	mg/L	1	6010B	Dissolved	
Vanadium	0.0027	J	0.0050	0.0010	mg/L	1	6010B	Dissolved	
Zinc	0.0093	J	0.020	0.0035	mg/L	1	6010B	Dissolved	
Antimony	0.0010	J	0.0030	0.00063	mg/L	1	6020	Total Recovery	
pH	7.56	HF	0.200	0.200	SU	1	9040B	Total/NA	

**Client Sample ID: EXISTING AMPSKY BACKGROUND MW**

**Lab Sample ID: 500-31462-5**

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.056	B	0.010	0.00090	mg/L	1	6010B	Total/NA	
Lead	0.0017	J	0.0050	0.0017	mg/L	1	6010B	Total/NA	
Vanadium	0.0028	J	0.0050	0.0010	mg/L	1	6010B	Total/NA	
Zinc	0.0052	J	0.020	0.0035	mg/L	1	6010B	Total/NA	
Barium	0.026	B	0.010	0.00090	mg/L	1	6010B	Dissolved	
Copper	0.015		0.010	0.0015	mg/L	1	6010B	Dissolved	
Lead	0.0017	J	0.0050	0.0017	mg/L	1	6010B	Dissolved	
Nickel	0.0026	J	0.010	0.0016	mg/L	1	6010B	Dissolved	
Vanadium	0.0032	J	0.0050	0.0010	mg/L	1	6010B	Dissolved	
Zinc	0.021		0.020	0.0035	mg/L	1	6010B	Dissolved	
Antimony	0.00083	J	0.0030	0.00063	mg/L	1	6020	Dissolved	
pH	7.25	HF	0.200	0.200	SU	1	9040B	Total/NA	

## Method Summary

Client: Deigan & Associates

Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1

SDG: 500-31462-1

Method	Method Description	Protocol	Laboratory
6010B	Metals (ICP)	SW846	TAL CHI
6020	Metals (ICP/MS)	SW846	TAL CHI
7470A	Mercury (CVAA)	SW846	TAL CHI
9040B	pH	SW846	TAL CHI

### Protocol References:

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

### Laboratory References:

TAL CHI = TestAmerica Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

## Sample Summary

Client: Deigan & Associates

Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-31462-1	LSF-MW-01	Water	03/04/11 11:55	03/05/11 09:30
500-31462-2	LSF-MW-02	Water	03/04/11 09:25	03/05/11 09:30
500-31462-3	LSF-MW-03	Water	03/04/11 11:10	03/05/11 09:30
500-31462-4	LSF-MW-04	Water	03/04/11 10:25	03/05/11 09:30
500-31462-5	EXISTING AMPSKY BACKGROUND MW	Water	03/04/11 12:45	03/05/11 09:30

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# Analytical Data

Client: Deigan & Associates  
 Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1  
 SDG: 500-31462-1

**Client Sample ID: LSF-MW-01**

**Lab Sample ID: 500-31462-1**

**Matrix: Water**

Date Collected: 03/04/11 11:55

Date Received: 03/05/11 09:30

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.010	0.0017	mg/L		03/08/11 09:15	03/08/11 19:32	1
<b>Barium</b>	<b>0.078</b>	<b>B</b>	0.010	0.00090	mg/L		03/08/11 09:15	03/08/11 19:32	1
Beryllium	<0.0040		0.0040	0.00025	mg/L		03/08/11 09:15	03/08/11 19:32	1
Cadmium	<0.0020		0.0020	0.00025	mg/L		03/08/11 09:15	03/08/11 19:32	1
Chromium	<0.010		0.010	0.0014	mg/L		03/08/11 09:15	03/08/11 19:32	1
Cobalt	<0.0050		0.0050	0.0012	mg/L		03/08/11 09:15	03/08/11 19:32	1
<b>Copper</b>	<b>0.0030</b>	<b>J</b>	0.010	0.0015	mg/L		03/08/11 09:15	03/08/11 19:32	1
Lead	<0.0050		0.0050	0.0017	mg/L		03/08/11 09:15	03/08/11 19:32	1
<b>Nickel</b>	<b>0.0022</b>	<b>J</b>	0.010	0.0016	mg/L		03/08/11 09:15	03/08/11 19:32	1
Selenium	<0.010		0.010	0.0024	mg/L		03/08/11 09:15	03/08/11 19:32	1
Silver	<0.0050		0.0050	0.00086	mg/L		03/08/11 09:15	03/08/11 19:32	1
Tin	<0.040		0.040	0.0036	mg/L		03/08/11 09:15	03/08/11 19:32	1
<b>Vanadium</b>	<b>0.0037</b>	<b>J</b>	0.0050	0.0010	mg/L		03/08/11 09:15	03/08/11 19:32	1
Zinc	<b>0.011</b>	<b>J</b>	0.020	0.0035	mg/L		03/08/11 09:15	03/08/11 19:32	1

**Method: 6010B - Metals (ICP) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.010	0.0017	mg/L		03/08/11 09:15	03/08/11 19:38	1
<b>Barium</b>	<b>0.058</b>	<b>B</b>	0.010	0.00090	mg/L		03/08/11 09:15	03/08/11 19:38	1
Beryllium	<0.0040		0.0040	0.00025	mg/L		03/08/11 09:15	03/08/11 19:38	1
Cadmium	<0.0020		0.0020	0.00025	mg/L		03/08/11 09:15	03/08/11 19:38	1
<b>Chromium</b>	<b>0.0069</b>	<b>J</b>	0.010	0.0014	mg/L		03/08/11 09:15	03/08/11 19:38	1
Cobalt	<0.0050		0.0050	0.0012	mg/L		03/08/11 09:15	03/08/11 19:38	1
Copper	<0.010		0.010	0.0015	mg/L		03/08/11 09:15	03/08/11 19:38	1
Lead	<0.0050		0.0050	0.0017	mg/L		03/08/11 09:15	03/08/11 19:38	1
<b>Nickel</b>	<b>0.0020</b>	<b>J</b>	0.010	0.0016	mg/L		03/08/11 09:15	03/08/11 19:38	1
Selenium	<0.010		0.010	0.0024	mg/L		03/08/11 09:15	03/08/11 19:38	1
Silver	<0.0050		0.0050	0.00086	mg/L		03/08/11 09:15	03/08/11 19:38	1
Tin	<0.040		0.040	0.0036	mg/L		03/08/11 09:15	03/08/11 19:38	1
<b>Vanadium</b>	<b>0.0033</b>	<b>J</b>	0.0050	0.0010	mg/L		03/08/11 09:15	03/08/11 19:38	1
Zinc	<b>0.0085</b>	<b>J</b>	0.020	0.0035	mg/L		03/08/11 09:15	03/08/11 19:38	1

**Method: 6020 - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030	0.00063	mg/L		03/10/11 09:25	03/11/11 10:11	1
Thallium	<0.0020		0.0020	0.00036	mg/L		03/10/11 09:25	03/11/11 10:11	1

**Method: 6020 - Metals (ICP/MS) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030	0.00063	mg/L		03/10/11 09:25	03/11/11 10:13	1
Thallium	<0.0020		0.0020	0.00036	mg/L		03/10/11 09:25	03/11/11 10:13	1

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000051	mg/L		03/09/11 07:30	03/09/11 11:32	1

**Method: 7470A - Mercury (CVAA) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000051	mg/L		03/09/11 07:30	03/09/11 11:43	1

# Analytical Data

Client: Deigan & Associates  
Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1  
SDG: 500-31462-1

**Client Sample ID: LSF-MW-01**

**Lab Sample ID: 500-31462-1**

Date Collected: 03/04/11 11:55

Matrix: Water

Date Received: 03/05/11 09:30

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.28	HF	0.200	0.200	SU			03/05/11 15:09	1

# Analytical Data

Client: Deigan & Associates  
Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1  
SDG: 500-31462-1

## Client Sample ID: LSF-MW-02

Lab Sample ID: 500-31462-2

Matrix: Water

Date Collected: 03/04/11 09:25  
Date Received: 03/05/11 09:30

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.010	0.0017	mg/L		03/08/11 09:15	03/08/11 20:09	1
<b>Barium</b>	<b>0.12</b>	<b>B</b>	0.010	0.00090	mg/L		03/08/11 09:15	03/08/11 20:09	1
Beryllium	<0.0040		0.0040	0.00025	mg/L		03/08/11 09:15	03/08/11 20:09	1
<b>Cadmium</b>	<b>0.0015</b>	<b>J</b>	0.0020	0.00025	mg/L		03/08/11 09:15	03/08/11 20:09	1
Chromium	<0.010		0.010	0.0014	mg/L		03/08/11 09:15	03/08/11 20:09	1
<b>Cobalt</b>	<b>0.0083</b>		0.0050	0.0012	mg/L		03/08/11 09:15	03/08/11 20:09	1
<b>Copper</b>	<b>0.74</b>		0.010	0.0015	mg/L		03/08/11 09:15	03/08/11 20:09	1
<b>Lead</b>	<b>0.0067</b>		0.0050	0.0017	mg/L		03/08/11 09:15	03/08/11 20:09	1
<b>Nickel</b>	<b>0.027</b>		0.010	0.0016	mg/L		03/08/11 09:15	03/08/11 20:09	1
Selenium	<0.010		0.010	0.0024	mg/L		03/08/11 09:15	03/08/11 20:09	1
Silver	<0.0050		0.0050	0.00086	mg/L		03/08/11 09:15	03/08/11 20:09	1
Tin	<0.040		0.040	0.0036	mg/L		03/08/11 09:15	03/08/11 20:09	1
<b>Vanadium</b>	<b>0.0037</b>	<b>J</b>	0.0050	0.0010	mg/L		03/08/11 09:15	03/08/11 20:09	1
<b>Zinc</b>	<b>0.72</b>		0.020	0.0035	mg/L		03/08/11 09:15	03/08/11 20:09	1

### Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.010	0.0017	mg/L		03/08/11 09:15	03/08/11 20:32	1
<b>Barium</b>	<b>0.098</b>	<b>B</b>	0.010	0.00090	mg/L		03/08/11 09:15	03/08/11 20:32	1
Beryllium	<0.0040		0.0040	0.00025	mg/L		03/08/11 09:15	03/08/11 20:32	1
<b>Cadmium</b>	<b>0.0011</b>	<b>J</b>	0.0020	0.00025	mg/L		03/08/11 09:15	03/08/11 20:32	1
Chromium	<0.010		0.010	0.0014	mg/L		03/08/11 09:15	03/08/11 20:32	1
<b>Cobalt</b>	<b>0.0066</b>		0.0050	0.0012	mg/L		03/08/11 09:15	03/08/11 20:32	1
<b>Copper</b>	<b>0.57</b>		0.010	0.0015	mg/L		03/08/11 09:15	03/08/11 20:32	1
<b>Lead</b>	<b>0.0026</b>	<b>J</b>	0.0050	0.0017	mg/L		03/08/11 09:15	03/08/11 20:32	1
<b>Nickel</b>	<b>0.022</b>		0.010	0.0016	mg/L		03/08/11 09:15	03/08/11 20:32	1
Selenium	<0.010		0.010	0.0024	mg/L		03/08/11 09:15	03/08/11 20:32	1
Silver	<0.0050		0.0050	0.00086	mg/L		03/08/11 09:15	03/08/11 20:32	1
Tin	<0.040		0.040	0.0036	mg/L		03/08/11 09:15	03/08/11 20:32	1
<b>Vanadium</b>	<b>0.0036</b>	<b>J</b>	0.0050	0.0010	mg/L		03/08/11 09:15	03/08/11 20:32	1
<b>Zinc</b>	<b>0.60</b>		0.020	0.0035	mg/L		03/08/11 09:15	03/08/11 20:32	1

### Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.0014</b>	<b>J</b>	0.0030	0.00063	mg/L		03/10/11 09:25	03/11/11 10:14	1
Thallium	<0.0020		0.0020	0.00036	mg/L		03/10/11 09:25	03/11/11 10:14	1

### Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.0012</b>	<b>J</b>	0.0030	0.00063	mg/L		03/10/11 09:25	03/11/11 10:16	1
Thallium	<0.0020		0.0020	0.00036	mg/L		03/10/11 09:25	03/11/11 10:16	1

### Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000051	mg/L		03/09/11 07:30	03/09/11 11:44	1

### Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000051	mg/L		03/09/11 07:30	03/09/11 11:46	1

# Analytical Data

Client: Deigan & Associates  
Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1  
SDG: 500-31462-1

**Client Sample ID: LSF-MW-02**

**Lab Sample ID: 500-31462-2**

Date Collected: 03/04/11 09:25

Matrix: Water

Date Received: 03/05/11 09:30

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.30	HF	0.200	0.200	SU			03/05/11 15:12	1

# Analytical Data

Client: Deigan & Associates  
Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1  
SDG: 500-31462-1

## Client Sample ID: LSF-MW-03

## Lab Sample ID: 500-31462-3

Matrix: Water

Date Collected: 03/04/11 11:10  
Date Received: 03/05/11 09:30

### Method: 6010B - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.010	0.0017	mg/L		03/08/11 09:15	03/08/11 20:38	1
<b>Barium</b>	<b>0.053</b>	<b>B</b>	0.010	0.00090	mg/L		03/08/11 09:15	03/08/11 20:38	1
Beryllium	<0.0040		0.0040	0.00025	mg/L		03/08/11 09:15	03/08/11 20:38	1
Cadmium	<0.0020		0.0020	0.00025	mg/L		03/08/11 09:15	03/08/11 20:38	1
Chromium	<0.010		0.010	0.0014	mg/L		03/08/11 09:15	03/08/11 20:38	1
Cobalt	<0.0050		0.0050	0.0012	mg/L		03/08/11 09:15	03/08/11 20:38	1
<b>Copper</b>	<b>0.26</b>		0.010	0.0015	mg/L		03/08/11 09:15	03/08/11 20:38	1
<b>Lead</b>	<b>0.0026</b>	<b>J</b>	0.0050	0.0017	mg/L		03/08/11 09:15	03/08/11 20:38	1
<b>Nickel</b>	<b>0.012</b>		0.010	0.0016	mg/L		03/08/11 09:15	03/08/11 20:38	1
Selenium	<0.010		0.010	0.0024	mg/L		03/08/11 09:15	03/08/11 20:38	1
Silver	<0.0050		0.0050	0.00086	mg/L		03/08/11 09:15	03/08/11 20:38	1
Tin	<0.040		0.040	0.0036	mg/L		03/08/11 09:15	03/08/11 20:38	1
<b>Vanadium</b>	<b>0.0026</b>	<b>J</b>	0.0050	0.0010	mg/L		03/08/11 09:15	03/08/11 20:38	1
<b>Zinc</b>	<b>0.17</b>		0.020	0.0035	mg/L		03/08/11 09:15	03/08/11 20:38	1

### Method: 6010B - Metals (ICP) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.010	0.0017	mg/L		03/08/11 09:15	03/08/11 20:44	1
<b>Barium</b>	<b>0.043</b>	<b>B</b>	0.010	0.00090	mg/L		03/08/11 09:15	03/08/11 20:44	1
Beryllium	<0.0040		0.0040	0.00025	mg/L		03/08/11 09:15	03/08/11 20:44	1
Cadmium	<0.0020		0.0020	0.00025	mg/L		03/08/11 09:15	03/08/11 20:44	1
Chromium	<0.010		0.010	0.0014	mg/L		03/08/11 09:15	03/08/11 20:44	1
Cobalt	<0.0050		0.0050	0.0012	mg/L		03/08/11 09:15	03/08/11 20:44	1
<b>Copper</b>	<b>0.21</b>		0.010	0.0015	mg/L		03/08/11 09:15	03/08/11 20:44	1
Lead	<0.0050		0.0050	0.0017	mg/L		03/08/11 09:15	03/08/11 20:44	1
<b>Nickel</b>	<b>0.0099</b>	<b>J</b>	0.010	0.0016	mg/L		03/08/11 09:15	03/08/11 20:44	1
Selenium	<0.010		0.010	0.0024	mg/L		03/08/11 09:15	03/08/11 20:44	1
Silver	<0.0050		0.0050	0.00086	mg/L		03/08/11 09:15	03/08/11 20:44	1
Tin	<0.040		0.040	0.0036	mg/L		03/08/11 09:15	03/08/11 20:44	1
<b>Vanadium</b>	<b>0.0023</b>	<b>J</b>	0.0050	0.0010	mg/L		03/08/11 09:15	03/08/11 20:44	1
<b>Zinc</b>	<b>0.14</b>		0.020	0.0035	mg/L		03/08/11 09:15	03/08/11 20:44	1

### Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.0014</b>	<b>J</b>	0.0030	0.00063	mg/L		03/10/11 09:25	03/11/11 10:17	1
Thallium	<0.0020		0.0020	0.00036	mg/L		03/10/11 09:25	03/11/11 10:17	1

### Method: 6020 - Metals (ICP/MS) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.0010</b>	<b>J</b>	0.0030	0.00063	mg/L		03/10/11 09:25	03/11/11 10:18	1
Thallium	<0.0020		0.0020	0.00036	mg/L		03/10/11 09:25	03/11/11 10:18	1

### Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000051	mg/L		03/09/11 07:30	03/09/11 11:48	1

### Method: 7470A - Mercury (CVAA) - Dissolved

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000051	mg/L		03/09/11 07:30	03/09/11 11:49	1

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# Analytical Data

Client: Deigan & Associates  
Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1  
SDG: 500-31462-1

**Client Sample ID: LSF-MW-03**

**Lab Sample ID: 500-31462-3**

Date Collected: 03/04/11 11:10

Matrix: Water

Date Received: 03/05/11 09:30

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.50	HF	0.200	0.200	SU			03/05/11 15:15	1

# Analytical Data

Client: Deigan & Associates  
 Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1  
 SDG: 500-31462-1

**Client Sample ID: LSF-MW-04**

**Lab Sample ID: 500-31462-4**

**Matrix: Water**

Date Collected: 03/04/11 10:25

Date Received: 03/05/11 09:30

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.010	0.0017	mg/L		03/08/11 09:15	03/08/11 20:51	1
<b>Barium</b>	<b>0.045</b>	<b>B</b>	0.010	0.00090	mg/L		03/08/11 09:15	03/08/11 20:51	1
Beryllium	<0.0040		0.0040	0.00025	mg/L		03/08/11 09:15	03/08/11 20:51	1
Cadmium	<0.0020		0.0020	0.00025	mg/L		03/08/11 09:15	03/08/11 20:51	1
Chromium	<0.010		0.010	0.0014	mg/L		03/08/11 09:15	03/08/11 20:51	1
Cobalt	<0.0050		0.0050	0.0012	mg/L		03/08/11 09:15	03/08/11 20:51	1
<b>Copper</b>	<b>0.024</b>		0.010	0.0015	mg/L		03/08/11 09:15	03/08/11 20:51	1
Lead	<0.0050		0.0050	0.0017	mg/L		03/08/11 09:15	03/08/11 20:51	1
<b>Nickel</b>	<b>0.0027</b>	<b>J</b>	0.010	0.0016	mg/L		03/08/11 09:15	03/08/11 20:51	1
Selenium	<0.010		0.010	0.0024	mg/L		03/08/11 09:15	03/08/11 20:51	1
Silver	<0.0050		0.0050	0.00086	mg/L		03/08/11 09:15	03/08/11 20:51	1
Tin	<0.040		0.040	0.0036	mg/L		03/08/11 09:15	03/08/11 20:51	1
<b>Vanadium</b>	<b>0.0032</b>	<b>J</b>	0.0050	0.0010	mg/L		03/08/11 09:15	03/08/11 20:51	1
<b>Zinc</b>	<b>0.027</b>		0.020	0.0035	mg/L		03/08/11 09:15	03/08/11 20:51	1

**Method: 6010B - Metals (ICP) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.010	0.0017	mg/L		03/08/11 09:15	03/08/11 20:57	1
<b>Barium</b>	<b>0.046</b>	<b>B</b>	0.010	0.00090	mg/L		03/08/11 09:15	03/08/11 20:57	1
Beryllium	<0.0040		0.0040	0.00025	mg/L		03/08/11 09:15	03/08/11 20:57	1
Cadmium	<0.0020		0.0020	0.00025	mg/L		03/08/11 09:15	03/08/11 20:57	1
Chromium	<0.010		0.010	0.0014	mg/L		03/08/11 09:15	03/08/11 20:57	1
Cobalt	<0.0050		0.0050	0.0012	mg/L		03/08/11 09:15	03/08/11 20:57	1
<b>Copper</b>	<b>0.0050</b>	<b>J</b>	0.010	0.0015	mg/L		03/08/11 09:15	03/08/11 20:57	1
Lead	<0.0050		0.0050	0.0017	mg/L		03/08/11 09:15	03/08/11 20:57	1
Nickel	<0.010		0.010	0.0016	mg/L		03/08/11 09:15	03/08/11 20:57	1
Selenium	<0.010		0.010	0.0024	mg/L		03/08/11 09:15	03/08/11 20:57	1
Silver	<0.0050		0.0050	0.00086	mg/L		03/08/11 09:15	03/08/11 20:57	1
Tin	<0.040		0.040	0.0036	mg/L		03/08/11 09:15	03/08/11 20:57	1
<b>Vanadium</b>	<b>0.0027</b>	<b>J</b>	0.0050	0.0010	mg/L		03/08/11 09:15	03/08/11 20:57	1
<b>Zinc</b>	<b>0.0093</b>	<b>J</b>	0.020	0.0035	mg/L		03/08/11 09:15	03/08/11 20:57	1

**Method: 6020 - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.0010</b>	<b>J</b>	0.0030	0.00063	mg/L		03/10/11 09:25	03/11/11 10:20	1
Thallium	<0.0020		0.0020	0.00036	mg/L		03/10/11 09:25	03/11/11 10:20	1

**Method: 6020 - Metals (ICP/MS) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030	0.00063	mg/L		03/10/11 09:25	03/11/11 10:21	1
Thallium	<0.0020		0.0020	0.00036	mg/L		03/10/11 09:25	03/11/11 10:21	1

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000051	mg/L		03/09/11 07:30	03/09/11 11:51	1

**Method: 7470A - Mercury (CVAA) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000051	mg/L		03/09/11 07:30	03/09/11 11:53	1

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# Analytical Data

Client: Deigan & Associates  
Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1  
SDG: 500-31462-1

**Client Sample ID: LSF-MW-04**

**Lab Sample ID: 500-31462-4**

Date Collected: 03/04/11 10:25

Matrix: Water

Date Received: 03/05/11 09:30

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.56	HF	0.200	0.200	SU			03/05/11 15:18	1

# Analytical Data

Client: Deigan & Associates  
 Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1  
 SDG: 500-31462-1

**Client Sample ID: EXISTING AMPSKY BACKGROUND MW**

**Lab Sample ID: 500-31462-5**

**Matrix: Water**

Date Collected: 03/04/11 12:45  
 Date Received: 03/05/11 09:30

**Method: 6010B - Metals (ICP)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.010	0.0017	mg/L		03/08/11 09:15	03/08/11 21:03	1
<b>Barium</b>	<b>0.056</b>	<b>B</b>	0.010	0.00090	mg/L		03/08/11 09:15	03/08/11 21:03	1
Beryllium	<0.0040		0.0040	0.00025	mg/L		03/08/11 09:15	03/08/11 21:03	1
Cadmium	<0.0020		0.0020	0.00025	mg/L		03/08/11 09:15	03/08/11 21:03	1
Chromium	<0.010		0.010	0.0014	mg/L		03/08/11 09:15	03/08/11 21:03	1
Cobalt	<0.0050		0.0050	0.0012	mg/L		03/08/11 09:15	03/08/11 21:03	1
Copper	<0.010		0.010	0.0015	mg/L		03/08/11 09:15	03/08/11 21:03	1
<b>Lead</b>	<b>0.0017</b>	<b>J</b>	0.0050	0.0017	mg/L		03/08/11 09:15	03/08/11 21:03	1
Nickel	<0.010		0.010	0.0016	mg/L		03/08/11 09:15	03/08/11 21:03	1
Selenium	<0.010		0.010	0.0024	mg/L		03/08/11 09:15	03/08/11 21:03	1
Silver	<0.0050		0.0050	0.00086	mg/L		03/08/11 09:15	03/08/11 21:03	1
Tin	<0.040		0.040	0.0036	mg/L		03/08/11 09:15	03/08/11 21:03	1
<b>Vanadium</b>	<b>0.0028</b>	<b>J</b>	0.0050	0.0010	mg/L		03/08/11 09:15	03/08/11 21:03	1
<b>Zinc</b>	<b>0.0052</b>	<b>J</b>	0.020	0.0035	mg/L		03/08/11 09:15	03/08/11 21:03	1

**Method: 6010B - Metals (ICP) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.010	0.0017	mg/L		03/08/11 09:15	03/08/11 21:09	1
<b>Barium</b>	<b>0.026</b>	<b>B</b>	0.010	0.00090	mg/L		03/08/11 09:15	03/08/11 21:09	1
Beryllium	<0.0040		0.0040	0.00025	mg/L		03/08/11 09:15	03/08/11 21:09	1
Cadmium	<0.0020		0.0020	0.00025	mg/L		03/08/11 09:15	03/08/11 21:09	1
Chromium	<0.010		0.010	0.0014	mg/L		03/08/11 09:15	03/08/11 21:09	1
Cobalt	<0.0050		0.0050	0.0012	mg/L		03/08/11 09:15	03/08/11 21:09	1
<b>Copper</b>	<b>0.015</b>		0.010	0.0015	mg/L		03/08/11 09:15	03/08/11 21:09	1
<b>Lead</b>	<b>0.0017</b>	<b>J</b>	0.0050	0.0017	mg/L		03/08/11 09:15	03/08/11 21:09	1
<b>Nickel</b>	<b>0.0026</b>	<b>J</b>	0.010	0.0016	mg/L		03/08/11 09:15	03/08/11 21:09	1
Selenium	<0.010		0.010	0.0024	mg/L		03/08/11 09:15	03/08/11 21:09	1
Silver	<0.0050		0.0050	0.00086	mg/L		03/08/11 09:15	03/08/11 21:09	1
Tin	<0.040		0.040	0.0036	mg/L		03/08/11 09:15	03/08/11 21:09	1
<b>Vanadium</b>	<b>0.0032</b>	<b>J</b>	0.0050	0.0010	mg/L		03/08/11 09:15	03/08/11 21:09	1
<b>Zinc</b>	<b>0.021</b>		0.020	0.0035	mg/L		03/08/11 09:15	03/08/11 21:09	1

**Method: 6020 - Metals (ICP/MS) - Total Recoverable**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030	0.00063	mg/L		03/10/11 09:25	03/11/11 10:26	1
Thallium	<0.0020		0.0020	0.00036	mg/L		03/10/11 09:25	03/11/11 10:26	1

**Method: 6020 - Metals (ICP/MS) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Antimony</b>	<b>0.00083</b>	<b>J</b>	0.0030	0.00063	mg/L		03/10/11 09:25	03/11/11 10:27	1
Thallium	<0.0020		0.0020	0.00036	mg/L		03/10/11 09:25	03/11/11 10:27	1

**Method: 7470A - Mercury (CVAA)**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000051	mg/L		03/09/11 07:30	03/09/11 11:54	1

**Method: 7470A - Mercury (CVAA) - Dissolved**

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000051	mg/L		03/09/11 07:30	03/09/11 11:56	1

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# Analytical Data

Client: Deigan & Associates  
Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1  
SDG: 500-31462-1

**Client Sample ID: EXISTING AMPSKY BACKGROUND MW**

**Lab Sample ID: 500-31462-5**

**Matrix: Water**

Date Collected: 03/04/11 12:45  
Date Received: 03/05/11 09:30

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
pH	7.25	HF	0.200	0.200	SU			03/05/11 15:21	1

# Qualifier Definition/Glossary

Client: Deigan & Associates

Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1

SDG: 500-31462-1

## Qualifiers

### Metals

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

### General Chemistry

Qualifier	Qualifier Description
HF	Field parameter with a holding time of 15 minutes

## Glossary

Glossary	Glossary Description
☀	Listed under the "D" column to designate that the result is reported on a dry weight basis.

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# QC Association Summary

Client: Deigan & Associates  
 Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1  
 SDG: 500-31462-1

## Metals

### Prep Batch: 107095

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-107095/1-A	MB 500-107095/1-A	Total/NA	Water	3010A	
500-31462-3	LSF-MW-03	Total/NA	Water	3010A	
500-31462-3	LSF-MW-03	Dissolved	Water	3010A	
500-31462-4	LSF-MW-04	Total/NA	Water	3010A	
500-31462-4	LSF-MW-04	Dissolved	Water	3010A	
500-31462-5	EXISTING AMPSKY BACKGROUND MW	Total/NA	Water	3010A	
500-31462-5	EXISTING AMPSKY BACKGROUND MW	Dissolved	Water	3010A	
LCS 500-107095/2-A	LCS 500-107095/2-A	Total/NA	Water	3010A	
500-31462-1	LSF-MW-01	Total/NA	Water	3010A	
500-31462-1	LSF-MW-01	Dissolved	Water	3010A	
500-31462-1 DU	LSF-MW-01	Dissolved	Water	3010A	
500-31462-1 MS	LSF-MW-01	Dissolved	Water	3010A	
500-31462-1 MSD	LSF-MW-01	Dissolved	Water	3010A	
500-31462-2	LSF-MW-02	Total/NA	Water	3010A	
500-31462-2	LSF-MW-02	Dissolved	Water	3010A	

### Analysis Batch: 107162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-107095/1-A	MB 500-107095/1-A	Total/NA	Water	6010B	107095
LCS 500-107095/2-A	LCS 500-107095/2-A	Total/NA	Water	6010B	107095
500-31462-1	LSF-MW-01	Total/NA	Water	6010B	107095
500-31462-1	LSF-MW-01	Dissolved	Water	6010B	107095
500-31462-1 DU	LSF-MW-01	Dissolved	Water	6010B	107095
500-31462-1 MS	LSF-MW-01	Dissolved	Water	6010B	107095
500-31462-1 MSD	LSF-MW-01	Dissolved	Water	6010B	107095
500-31462-2	LSF-MW-02	Total/NA	Water	6010B	107095
500-31462-2	LSF-MW-02	Dissolved	Water	6010B	107095
500-31462-3	LSF-MW-03	Total/NA	Water	6010B	107095
500-31462-3	LSF-MW-03	Dissolved	Water	6010B	107095
500-31462-4	LSF-MW-04	Total/NA	Water	6010B	107095
500-31462-4	LSF-MW-04	Dissolved	Water	6010B	107095
500-31462-5	EXISTING AMPSKY BACKGROUND MW	Total/NA	Water	6010B	107095
500-31462-5	EXISTING AMPSKY BACKGROUND MW	Dissolved	Water	6010B	107095

### Prep Batch: 107176

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-31462-1	LSF-MW-01	Total/NA	Water	7470A	
500-31462-1 DU	LSF-MW-01	Total/NA	Water	7470A	
500-31462-1 MS	LSF-MW-01	Total/NA	Water	7470A	
500-31462-1 MSD	LSF-MW-01	Total/NA	Water	7470A	
500-31462-1	LSF-MW-01	Dissolved	Water	7470A	
500-31462-2	LSF-MW-02	Total/NA	Water	7470A	
500-31462-2	LSF-MW-02	Dissolved	Water	7470A	
500-31462-3	LSF-MW-03	Total/NA	Water	7470A	
500-31462-3	LSF-MW-03	Dissolved	Water	7470A	
500-31462-4	LSF-MW-04	Total/NA	Water	7470A	
500-31462-4	LSF-MW-04	Dissolved	Water	7470A	
500-31462-5	EXISTING AMPSKY BACKGROUND MW	Total/NA	Water	7470A	
500-31462-5	EXISTING AMPSKY BACKGROUND MW	Dissolved	Water	7470A	
MB 500-107176/7-A	MB 500-107176/7-A	Total/NA	Water	7470A	
LCS 500-107176/8-A	LCS 500-107176/8-A	Total/NA	Water	7470A	

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# QC Association Summary

Client: Deigan & Associates  
Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1  
SDG: 500-31462-1

## Metals (Continued)

### Analysis Batch: 107234

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-107176/7-A	MB 500-107176/7-A	Total/NA	Water	7470A	107176
LCS 500-107176/8-A	LCS 500-107176/8-A	Total/NA	Water	7470A	107176
500-31462-1	LSF-MW-01	Total/NA	Water	7470A	107176
500-31462-1 DU	LSF-MW-01	Total/NA	Water	7470A	107176
500-31462-1 MS	LSF-MW-01	Total/NA	Water	7470A	107176
500-31462-1 MSD	LSF-MW-01	Total/NA	Water	7470A	107176
500-31462-1	LSF-MW-01	Dissolved	Water	7470A	107176
500-31462-2	LSF-MW-02	Total/NA	Water	7470A	107176
500-31462-2	LSF-MW-02	Dissolved	Water	7470A	107176
500-31462-3	LSF-MW-03	Total/NA	Water	7470A	107176
500-31462-3	LSF-MW-03	Dissolved	Water	7470A	107176
500-31462-4	LSF-MW-04	Total/NA	Water	7470A	107176
500-31462-4	LSF-MW-04	Dissolved	Water	7470A	107176
500-31462-5	EXISTING AMPSKY BACKGROUND MW	Total/NA	Water	7470A	107176
500-31462-5	EXISTING AMPSKY BACKGROUND MW	Dissolved	Water	7470A	107176

### Prep Batch: 107323

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-107323/1-A	MB 500-107323/1-A	Total Recoverable	Water	3005A	
500-31462-3	LSF-MW-03	Dissolved	Water	3005A	
500-31462-4	LSF-MW-04	Total Recoverable	Water	3005A	
500-31462-4	LSF-MW-04	Dissolved	Water	3005A	
500-31462-5	EXISTING AMPSKY BACKGROUND MW	Total Recoverable	Water	3005A	
500-31462-5	EXISTING AMPSKY BACKGROUND MW	Dissolved	Water	3005A	
LCS 500-107323/2-A	LCS 500-107323/2-A	Total Recoverable	Water	3005A	
500-31462-1	LSF-MW-01	Total Recoverable	Water	3005A	
500-31462-1	LSF-MW-01	Dissolved	Water	3005A	
500-31462-2	LSF-MW-02	Total Recoverable	Water	3005A	
500-31462-2	LSF-MW-02	Dissolved	Water	3005A	
500-31462-3	LSF-MW-03	Total Recoverable	Water	3005A	

### Analysis Batch: 107429

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 500-107323/1-A	MB 500-107323/1-A	Total Recoverable	Water	6020	107323
LCS 500-107323/2-A	LCS 500-107323/2-A	Total Recoverable	Water	6020	107323
500-31462-1	LSF-MW-01	Total Recoverable	Water	6020	107323
500-31462-1	LSF-MW-01	Dissolved	Water	6020	107323
500-31462-2	LSF-MW-02	Total Recoverable	Water	6020	107323
500-31462-2	LSF-MW-02	Dissolved	Water	6020	107323
500-31462-3	LSF-MW-03	Total Recoverable	Water	6020	107323
500-31462-3	LSF-MW-03	Dissolved	Water	6020	107323
500-31462-4	LSF-MW-04	Total Recoverable	Water	6020	107323
500-31462-4	LSF-MW-04	Dissolved	Water	6020	107323
500-31462-5	EXISTING AMPSKY BACKGROUND MW	Total Recoverable	Water	6020	107323
500-31462-5	EXISTING AMPSKY BACKGROUND MW	Dissolved	Water	6020	107323

## General Chemistry

### Analysis Batch: 106929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-31462-1	LSF-MW-01	Total/NA	Water	9040B	
500-31462-1 DU	LSF-MW-01	Total/NA	Water	9040B	

TestAmerica Chicago

# QC Association Summary

Client: Deigan & Associates  
Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1  
SDG: 500-31462-1

## General Chemistry (Continued)

### Analysis Batch: 106929 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-31462-2	LSF-MW-02	Total/NA	Water	9040B	
500-31462-2 DU	LSF-MW-02	Total/NA	Water	9040B	
500-31462-3	LSF-MW-03	Total/NA	Water	9040B	
500-31462-3 DU	LSF-MW-03	Total/NA	Water	9040B	
500-31462-4	LSF-MW-04	Total/NA	Water	9040B	
500-31462-4 DU	LSF-MW-04	Total/NA	Water	9040B	
500-31462-5	EXISTING AMPSKY BACKGROUND MW	Total/NA	Water	9040B	
500-31462-5 DU	EXISTING AMPSKY BACKGROUND MW	Total/NA	Water	9040B	

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# Quality Control Data

Client: Deigan & Associates  
 Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1  
 SDG: 500-31462-1

## Method: 6010B - Metals (ICP)

**Lab Sample ID: MB 500-107095/1-A**

**Matrix: Water**

**Analysis Batch: 107162**

**Client Sample ID: MB 500-107095/1-A**

**Prep Type: Total/NA**

**Prep Batch: 107095**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.010		0.010	0.0017	mg/L		03/08/11 09:15	03/08/11 19:19	1
Barium	0.00137	J	0.010	0.00090	mg/L		03/08/11 09:15	03/08/11 19:19	1
Beryllium	<0.0040		0.0040	0.00025	mg/L		03/08/11 09:15	03/08/11 19:19	1
Cadmium	<0.0020		0.0020	0.00025	mg/L		03/08/11 09:15	03/08/11 19:19	1
Chromium	<0.010		0.010	0.0014	mg/L		03/08/11 09:15	03/08/11 19:19	1
Cobalt	<0.0050		0.0050	0.0012	mg/L		03/08/11 09:15	03/08/11 19:19	1
Copper	<0.010		0.010	0.0015	mg/L		03/08/11 09:15	03/08/11 19:19	1
Lead	<0.0050		0.0050	0.0017	mg/L		03/08/11 09:15	03/08/11 19:19	1
Nickel	<0.010		0.010	0.0016	mg/L		03/08/11 09:15	03/08/11 19:19	1
Selenium	<0.010		0.010	0.0024	mg/L		03/08/11 09:15	03/08/11 19:19	1
Silver	<0.0050		0.0050	0.00086	mg/L		03/08/11 09:15	03/08/11 19:19	1
Tin	<0.040		0.040	0.0036	mg/L		03/08/11 09:15	03/08/11 19:19	1
Vanadium	<0.0050		0.0050	0.0010	mg/L		03/08/11 09:15	03/08/11 19:19	1
Zinc	<0.020		0.020	0.0035	mg/L		03/08/11 09:15	03/08/11 19:19	1

**Lab Sample ID: LCS 500-107095/2-A**

**Matrix: Water**

**Analysis Batch: 107162**

**Client Sample ID: LCS 500-107095/2-A**

**Prep Type: Total/NA**

**Prep Batch: 107095**

Analyte	Spike		LCS			D	% Rec	% Rec.	
	Added	Result	LCS	Qualifier	Unit			Limits	
Arsenic	0.100	0.0941			mg/L		94	80 - 120	
Barium	2.00	2.01			mg/L		100	80 - 120	
Beryllium	0.0500	0.0477			mg/L		95	80 - 120	
Cadmium	0.0500	0.0485			mg/L		97	80 - 120	
Chromium	0.200	0.199			mg/L		100	80 - 120	
Cobalt	0.500	0.487			mg/L		97	80 - 120	
Copper	0.250	0.253			mg/L		101	80 - 120	
Lead	0.100	0.0991			mg/L		99	80 - 120	
Nickel	0.500	0.490			mg/L		98	80 - 120	
Selenium	0.100	0.0854			mg/L		85	80 - 120	
Silver	0.0500	0.0463			mg/L		93	80 - 120	
Tin	1.00	0.968			mg/L		97	80 - 120	
Vanadium	0.500	0.495			mg/L		99	80 - 120	
Zinc	0.500	0.472			mg/L		94	80 - 120	

**Lab Sample ID: 500-31462-1 MS**

**Matrix: Water**

**Analysis Batch: 107162**

**Client Sample ID: LSF-MW-01**

**Prep Type: Dissolved**

**Prep Batch: 107095**

Analyte	Sample		Spike		MS		D	% Rec	% Rec.	
	Result	Qualifier	Added	Result	Qualifier	Unit			Limits	
Arsenic	<0.010		0.100	0.0971		mg/L		97	75 - 125	
Barium	0.058	B	2.00	2.08		mg/L		101	75 - 125	
Beryllium	<0.0040		0.0500	0.0472		mg/L		94	75 - 125	
Cadmium	<0.0020		0.0500	0.0468		mg/L		94	75 - 125	
Chromium	0.0069	J	0.200	0.200		mg/L		97	75 - 125	
Cobalt	<0.0050		0.500	0.467		mg/L		93	75 - 125	
Copper	<0.010		0.250	0.255		mg/L		102	75 - 125	
Lead	<0.0050		0.100	0.0970		mg/L		97	75 - 125	
Nickel	0.0020	J	0.500	0.472		mg/L		94	75 - 125	
Selenium	<0.010		0.100	0.0870		mg/L		87	75 - 125	

TestAmerica Chicago

# Quality Control Data

Client: Deigan & Associates

Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1

SDG: 500-31462-1

## Method: 6010B - Metals (ICP) (Continued)

**Lab Sample ID: 500-31462-1 MS**

**Matrix: Water**

**Analysis Batch: 107162**

**Client Sample ID: LSF-MW-01**

**Prep Type: Dissolved**

**Prep Batch: 107095**

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	% Rec	% Rec.	Limits	RPD
	Result	Qualifier	Added	Result	Qualifier				Limits		
Silver	<0.0050		0.0500	0.0471		mg/L		94	75 - 125		
Tin	<0.040		1.00	0.964		mg/L		96	75 - 125		
Vanadium	0.0033	J	0.500	0.493		mg/L		98	75 - 125		
Zinc	0.0085	J	0.500	0.456		mg/L		89	75 - 125		

**Lab Sample ID: 500-31462-1 MSD**

**Matrix: Water**

**Analysis Batch: 107162**

**Client Sample ID: LSF-MW-01**

**Prep Type: Dissolved**

**Prep Batch: 107095**

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	% Rec	% Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits		
Arsenic	<0.010		0.100	0.0950		mg/L		95	75 - 125	2	20
Barium	0.058	B	2.00	2.08		mg/L		101	75 - 125	0	20
Beryllium	<0.0040		0.0500	0.0476		mg/L		95	75 - 125	1	20
Cadmium	<0.0020		0.0500	0.0467		mg/L		93	75 - 125	0	20
Chromium	0.0069	J	0.200	0.202		mg/L		97	75 - 125	1	20
Cobalt	<0.0050		0.500	0.469		mg/L		94	75 - 125	0	20
Copper	<0.010		0.250	0.255		mg/L		102	75 - 125	0	20
Lead	<0.0050		0.100	0.0977		mg/L		98	75 - 125	1	20
Nickel	0.0020	J	0.500	0.473		mg/L		94	75 - 125	0	20
Selenium	<0.010		0.100	0.0866		mg/L		87	75 - 125	0	20
Silver	<0.0050		0.0500	0.0472		mg/L		94	75 - 125	0	20
Tin	<0.040		1.00	0.977		mg/L		98	75 - 125	1	20
Vanadium	0.0033	J	0.500	0.495		mg/L		98	75 - 125	0	20
Zinc	0.0085	J	0.500	0.458		mg/L		90	75 - 125	1	20

**Lab Sample ID: 500-31462-1 DU**

**Client Sample ID: LSF-MW-01**

**Matrix: Water**

**Analysis Batch: 107162**

**Prep Type: Dissolved**

**Prep Batch: 107095**

Analyte	Sample	Sample	Spike	DU	DU	Unit	D			RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Arsenic	<0.010			<0.010		mg/L				NC	20
Barium	0.058	B		0.0592		mg/L				2	20
Beryllium	<0.0040			<0.0040		mg/L				NC	20
Cadmium	<0.0020			<0.0020		mg/L				NC	20
Chromium	0.0069	J		0.00691	J	mg/L				0.4	20
Cobalt	<0.0050			<0.0050		mg/L				NC	20
Copper	<0.010			0.00158	J	mg/L				NC	20
Lead	<0.0050			0.00171	J	mg/L				NC	20
Nickel	0.0020	J		0.00177	J	mg/L				14	20
Selenium	<0.010			<0.010		mg/L				NC	20
Silver	<0.0050			<0.0050		mg/L				NC	20
Tin	<0.040			<0.040		mg/L				NC	20
Vanadium	0.0033	J		0.00316	J	mg/L				4	20
Zinc	0.0085	J		0.0106	J	mg/L				22	20

# Quality Control Data

Client: Deigan & Associates  
Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1  
SDG: 500-31462-1

## Method: 6020 - Metals (ICP/MS)

**Lab Sample ID:** MB 500-107323/1-A

**Matrix:** Water

**Analysis Batch:** 107429

**Client Sample ID:** MB 500-107323/1-A

**Prep Type:** Total Recoverable

**Prep Batch:** 107323

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0030		0.0030	0.00063	mg/L		03/10/11 09:25	03/11/11 09:42	1
Thallium	<0.0020		0.0020	0.00036	mg/L		03/10/11 09:25	03/11/11 09:42	1

**Lab Sample ID:** LCS 500-107323/2-A

**Matrix:** Water

**Analysis Batch:** 107429

**Client Sample ID:** LCS 500-107323/2-A

**Prep Type:** Total Recoverable

**Prep Batch:** 107323

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec.	Limits
Antimony	0.500	0.511		mg/L		102	80 - 120
Thallium	0.100	0.104		mg/L		104	80 - 120

## Method: 7470A - Mercury (CVAA)

**Lab Sample ID:** MB 500-107176/7-A

**Matrix:** Water

**Analysis Batch:** 107234

**Client Sample ID:** MB 500-107176/7-A

**Prep Type:** Total/NA

**Prep Batch:** 107176

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.00020		0.00020	0.000051	mg/L		03/09/11 07:30	03/09/11 11:27	1

**Lab Sample ID:** LCS 500-107176/8-A

**Matrix:** Water

**Analysis Batch:** 107234

**Client Sample ID:** LCS 500-107176/8-A

**Prep Type:** Total/NA

**Prep Batch:** 107176

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	% Rec.	Limits
Mercury	0.00200	0.00218		mg/L		109	80 - 120

**Lab Sample ID:** 500-31462-1 MS

**Matrix:** Water

**Analysis Batch:** 107234

**Client Sample ID:** LSF-MW-01

**Prep Type:** Total/NA

**Prep Batch:** 107176

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	% Rec.	Limits
Mercury	<0.00020		0.00100	0.00108		mg/L		108	75 - 125

**Lab Sample ID:** 500-31462-1 MSD

**Matrix:** Water

**Analysis Batch:** 107234

**Client Sample ID:** LSF-MW-01

**Prep Type:** Total/NA

**Prep Batch:** 107176

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	% Rec.	RPD
Mercury	<0.00020		0.00100	0.00112		mg/L		112	75 - 125

**Client Sample ID:** LSF-MW-01

**Prep Type:** Total/NA

**Prep Batch:** 107176

Analyte	Sample Result	Sample Qualifier	DU	DU	RPD
			Result	Qualifier	Limit
Mercury	<0.00020		<0.00020		20

# Quality Control Data

Client: Deigan & Associates  
 Project/Site: Former Lake Shore Foundry

TestAmerica Job ID: 500-31462-1  
 SDG: 500-31462-1

## Method: 9040B - pH

**Lab Sample ID: 500-31462-1 DU**

**Matrix: Water**

**Analysis Batch: 106929**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
pH	7.28	HF	7.290		SU	D	0.1	

**Lab Sample ID: 500-31462-2 DU**

**Matrix: Water**

**Analysis Batch: 106929**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
pH	7.30	HF	7.320		SU	D	0.3	

**Lab Sample ID: 500-31462-3 DU**

**Matrix: Water**

**Analysis Batch: 106929**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
pH	7.50	HF	7.510		SU	D	0.13	

**Lab Sample ID: 500-31462-4 DU**

**Matrix: Water**

**Analysis Batch: 106929**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
pH	7.56	HF	7.590		SU	D	0.39	

**Lab Sample ID: 500-31462-5 DU**

**Matrix: Water**

**Analysis Batch: 106929**

Analyte	Sample	Sample	DU	DU	Unit	D	RPD	Limit
	Result	Qualifier	Result	Qualifier				
pH	7.25	HF	7.260		SU	D	0.13	

**Client Sample ID: LSF-MW-01**  
**Prep Type: Total/NA**

**Client Sample ID: LSF-MW-02**  
**Prep Type: Total/NA**

**Client Sample ID: LSF-MW-03**  
**Prep Type: Total/NA**

**Client Sample ID: LSF-MW-04**  
**Prep Type: Total/NA**

**Client Sample ID: EXISTING AMPSKY BACKGROUND MW**  
**Prep Type: Total/NA**

## TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

2417 Bond Street, University Park, IL 60484  
Phone: 708.534.5200 Fax: 708.534.5211

Report To	(optional)
Contact:	
Company: <u>Degent Assoc LLC</u>	
Address:	
Address:	
Phone: <u>(847) 578-5000</u>	
Fax:	
E-Mail:	
Bill To	(optional)
Contact:	
Company:	
Address:	
Address:	
Phone:	
Fax:	
PO#/Reference#	

Lab Job #: 500-31462

Chain of Custody Number: \_\_\_\_\_

Page 1 of 1

Temperature °C of Cooler: 3.3

Sample ID	Client Project #	Preservative		Parameter	PH	Total Metals	Dissolved Metals								Preservative Key
		# of Containers	Matrix												
LSF-MW-01	Lake Shore Foundry	3	W	X	X	X									1. HCL, Cool to 4°
LSF-MW-02	Waukegan, IL	3	W	X	X	X									2. H2SO4, Cool to 4°
LSF-MW-03	M. Grollio	3	W	X	X	X									3. HNO3, Cool to 4°
LSF-MW-04	WRIGHT	3	W	X	X	X									4. NaOH, Cool to 4°
LSF-MW-05															5. NaOH/Zn, Cool to 4°
Existing Amosite Background MW		3	W	X	X	X									6. NaHSO4
															7. Cool to 4°
															8. None
															9. Other
															Comments

## Turnaround Time Required (Business Days)

1 Day  2 Days  5 Days  7 Days  10 Days  15 Days  Other \_\_\_\_\_ (A fee may be assessed if samples are retained longer than 1 month)

Requested Due Date \_\_\_\_\_

## Sample Disposal

 Return to Client Disposal by Lab Archive for \_\_\_\_\_ Months

(A fee may be assessed if samples are retained longer than 1 month)

Inquished By <u>M. Grollio</u>	Company <u>Degent Assoc LLC</u>	Date <u>3-4-11</u>	Time <u>330</u>	Received By <u>JL</u>	Company <u>FedEx</u>	Date <u>3-4-11</u>	Time <u>330</u>	Lab Courier <u>FX</u>
Inquished By <u></u>	Company <u></u>	Date <u></u>	Time <u></u>	Received By <u></u>	Company <u>T4</u>	Date <u>3-5-11</u>	Time <u>0930</u>	Shipped <u>FX</u>
Inquished By <u></u>	Company <u></u>	Date <u></u>	Time <u></u>	Received By <u></u>	Company <u></u>	Date <u></u>	Time <u></u>	Hand Delivered <u></u>

Matrix Key W - Wastewater - Water - Soil - Sludge S - Miscellaneous - Oil - Air	Client Comments     	Lab Comments:     
SE - Sediment SO - Soil L - Leachate WI - Wipe DW - Drinking Water O - Other		

## Login Sample Receipt Checklist

Client: Deigan & Associates

Job Number: 500-31462-1

SDG Number: 500-31462-1

**Login Number: 31462**

**List Source: TestAmerica Chicago**

**List Number: 1**

**Creator: Lunt, Jeff T**

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
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	3.3
Cooler Temperature is acceptable.	True	
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	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	